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August 1, 2014

Ms. Tania Treis
Principal
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Re: Santa Cruz 115 Kilovolt Reinforcement Project (A.12-01-012)
Response to Data Request #10

Dear Ms. Treis:

This letter responds to your July 16, 2014 request for additional information and data regarding Pacific Gas and Electric Company's (PG&E's) application (A.12-01-012) and Proponent's Environmental Assessment for a Permit to Construct the Santa Cruz 115 Kilovolt (kV) Reinforcement Project (project). All of the questions are addressed with the exception of two—Questions 5 and 7. Responses to these two questions will be provided to the California Public Utilities Commission (CPUC) in a separate submittal by August 15. The original text of each question is followed by PG&E's response.

CPUC Data Request Question #1

In PG&E's comment letter on the project's Draft IS/MND, PG&E stated that a formal wetland delineation has been completed (bottom of page 5). Please provide the updated Wetlands Delineation Report and related GIS files.

PG&E's Response

A Preliminary Delineation of Waters of the United States was prepared in July 2013 by AECOM and is provided in Attachment A: Preliminary Delineation of Waters of the United States. A summary table of the geographic information system (GIS) layers for the Preliminary Delineation of Waters of the United States is provided in Attachment B: GIS Data Transfer Summary. The GIS shapefiles are included with this submittal in the file named "Santa Cruz_Data_Request_10_Shapefiles_WetDel."

CPUC Data Request Question #2

Please provide any meeting notes between PG&E and the Central Water District concerning potential impacts on CWD water lines. Please provide notes on meetings with Santa Cruz

County Public Works Department, and any other agencies for consultations that have occurred since the Draft IS/MND circulation.

PG&E's Response

PG&E staff met with Ralph Bracamonte of the Central Water District (CWD) on February 24, 2014. PG&E and the CWD discussed the location of existing water lines along the Cox-Freedom Segment and the status of the California Environmental Quality Act process for the project. PG&E and the CWD agreed to further discussions on how to protect and/or repair existing water lines during construction of the project. No meeting notes were prepared. In addition, PG&E met with the Santa Cruz County (County) Public Works Department on April 22, 2014. Meeting notes from the Public Works Department meeting are provided in Attachment C: Santa Cruz County Public Works Department Meeting Notes.

CPUC Data Request Question #3

Please provide the final FAA determinations for the project poles.

PG&E's Response

A summary table of the Federal Aviation Administration's Determination of No Hazard to Air Navigation for the project and the individual determinations for each structure are provided in Attachment D: FAA Determination of No Hazard to Air Navigation.

CPUC Data Request Question #4

Please provide a Magnetic Field Management Plan for the project that addresses PG&E's EMF Utility Guidelines and the specific measures that have been incorporated into this project.

PG&E's Response

The Preliminary Magnetic Field Management Plan that PG&E prepared for the project is provided in Attachment E: Preliminary Magnetic Field Management Plan. This plan will not be finalized until the project's design has been finalized.

CPUC Data Request Question #5

Under the No Project Alternative, the project would not be implemented. In this case, would PG&E implement some type of system alternative as a temporary fix as demand increases? Please provide a description of what this system alternative would be, if applicable. If PG&E could/would not make any other changes, please explain why and the consequences of not making any changes to reliability, growth, etc.

PG&E's Response

A description of the system alternatives that may be implemented under the No Project Alternative will be provided to the CPUC in a separate submittal by August 15.

CPUC Data Request Question #6

For Alternative 1 (Southern Alignment Overhead Line), please provide the number of new corten steel poles to be installed, the average height of the corten steel poles, how many existing

wooden pole structures would be replaced, and the average height of the wooden pole structures to be replaced.

PG&E's Response

Under Alternative 1 (Southern Alignment Overhead Line), PG&E would remove 127 existing poles and replace them with 83 new tubular steel poles (TSPs). The existing poles have an average aboveground height of approximately 62 feet. The new TSPs would range in height from 70 to 105 feet aboveground.

CPUC Data Request Question #7

Please provide a description of an additional alternative or alternatives along the Southern Alignment. An option may include undergrounding the portion of the alignment near the gas pipeline to avoid installation of the overhead lines in a new alignment that requires substantial tree removal and impacts to homes/extensive new easements. Were other alignments along the southern route that reduce visual impacts considered, and if so, can you describe these alignments?

PG&E's Response

A discussion of additional alternatives along the Southern Alignment will be provided to the CPUC in a separate submittal by August 15.

CPUC Data Request Question #8

For Alternative 4D (Undergrounding Cox Road, Day Valley Road, and McDonald Road Segments), please provide the following information:

- a. Provide a detailed description of the purpose of the retaining walls around the riser pole locations, including a justification for the material and height of the walls.*

PG&E's Response

Two TSP riser structures would be required to convert the overhead alignment to an underground configuration. A TSP riser pole (Northern Riser Pole) would replace the proposed dead-end Pole C-89. The Northern Riser Pole would be located directly under the existing overhead transmission line—approximately 20 feet off of Cox Road—to optimize the design of the existing overhead transmission, new overhead transmission, and new underground transmission lines. At this location, there is a significant topographical slope, which is not conducive to construction, operation, or maintenance activities and would require modifications to reduce the slope to road level. Excavation and leveling would be necessary to create a flat working area to allow for construction equipment—such as backhoes, cranes, bulldozers, drill rigs, dump trucks, utility trucks, and materials—to enter the area during construction.

In order to account for the slope at the proposed Northern Riser Pole, PG&E evaluated several options, such as re-sloping the grade, benching the land, and constructing a retaining wall. Re-sloping or benching would require the removal of an existing driveway, and possibly a structure located on the north side of the driveway. PG&E determined that constructing a retaining wall would be the least invasive option, as it would avoid the relocation of the driveway or potential impacts to the existing residence.

Through preliminary engineering, it was determined that the retaining wall would need to be 4 to 5 feet above the grade for fall protection. In addition, a small amount of sloping on the high side of the hill would be necessary to allow for water runoff. The size and the layout of the retaining wall was determined based on the need to accommodate construction, operation, and maintenance equipment. Based on preliminary engineering, it was determined that the wall would need to be approximately 20 feet in height from the road grade to the top of the back wall. The actual height would require additional detailed design. The wall would be made of poured-in-place concrete to a thickness that is suitable to hold back the adjacent soil. Concrete is a preferred building material for a retaining wall of this size, which needs to last as long as or longer than the underground cable system (which has a life expectancy of 40 years).

A second TSP riser pole (Southern Riser Pole) would be placed approximately 100 feet south of the proposed Pole C-83—directly under the existing overhead transmission line and approximately 20 feet from the west side of McDonald Road. This location provides convenient access for construction and maintenance equipment. In addition, locating the Southern Riser Pole under the existing overhead transmission line would allow for straightforward transition to underground from the proposed overhead poles for the new circuit. Locating the Southern Riser Pole on the east side of McDonald Road would be less ideal as it could require an additional TSP and would require the removal of vegetation from the residence along McDonald Road.

A topographical slope is located on the west side of McDonald Road. This slope is not as significant as the one at the Northern Riser Pole location; however, it is still not conducive to construction or operation and maintenance activities, and may require modifications to reduce the slope to road level for a flat working area. The flat working area would allow for construction equipment—such as backhoes, cranes, bulldozers, drill rigs, dump trucks, utility trucks, and materials—to enter the area and perform construction. The driveway on the south side of the Southern Riser Pole location could be affected by sloping or benching. As a result, PG&E determined that a retaining wall would be the least invasive solution to account for the surrounding area's slope.

As with the Northern Riser Pole, the design of the retaining wall for the Southern Riser Pole would need to be 4 to 5 feet above the grade for fall protection. A small amount of sloping on the high side of the hill would be required to allow for water runoff. The overall layout and size of the retaining wall would need to accommodate construction, operation, and maintenance equipment. It would also need to accommodate small maintenance vehicle access from McDonald Road (ingress parking) without interfering with traffic. The existing fence would be removed, and bollards would be installed to protect the riser structure. It is conservatively estimated that the retaining wall would be approximately 10 feet in height from the road grade to the top of the back wall; however, the actual height would require additional detailed design. The wall would be made of poured-in-place concrete to a thickness suitable to hold back the adjacent soil.

- b. Provide a rationale for the location of the underground vaults – can the vaults be moved to a location where fewer trees would be impacted?*

PG&E's Response

The underground cable system requires the installation of cable pulling and splicing vaults for construction and long-term operation. The sizing of these vaults is based on PG&E's standards

and practices in conjunction with cable and splice manufacturers. The geographical location of the vaults and distances between them (which are called sections) are based on multiple technical, environmental, and public impact factors evaluated during the design process.

At each riser structure, it is recommended that a vault be installed within 100 feet of the riser structure. This allows a cable splice near the riser structure in the event of a termination failure. The vaults would not have splices within them during construction, nor would they be used to pull cable. However, they are designed to facilitate pulling and splicing at a later date, if needed.

The following technical factors determine both the distance between riser structures and vaults and the number of vaults required:

- The limited amount of cable length that can be practically placed onto a transportable cable reel for installation, which is approximately 1,500 feet.
- Forces of cable tension and cable sidewall pressures from pulling the cable through the conduits from one vault to another (or from the riser structure). The locations of the vaults can be highly determined by these forces, which limit the distance between vaults.
- Cable system reliability, which increases if the number of splices/vaults is decreased, meaning the best practice is to limit the number of vaults in a cable system.

Currently, the lengths of the cable sections are approximately 1,820, 1,420 and 1,580 feet. Modifying the location of the vaults would require detailed review of the entire system and could potentially require additional vaults.

In addition to the technical design factors noted previously, PG&E considered and evaluated other localized factors. For example, each vault was designed to be off of the road, allowing local residents and emergency vehicles access to properties, as needed, during construction. If the vaults were designed in the center of the road, it would be impossible—and certainly impractical—to allow vehicle passage during construction and later during maintenance activities. These comments are made without the benefit of a final engineering design. It is possible to minimize tree removal by placing vaults in open areas without vegetation; however locating vaults in open areas may require additional vaults and would not represent an optimized engineering design. In addition, PG&E considered other factors when siting the underground vaults, such as Santa Cruz long-toed salamander habitat, the need to remove trees and vegetation, the locations of other utilities, and the avoidance of driveways and access areas.

- c. Describe how access to properties would be maintained during construction (e.g., how steel plates would be used and the time it takes to plate trenches to allow residential access).*

PG&E's Response

Steel plates would be utilized, as needed, to maintain access to properties. At vault locations, traffic would be flagged, with traffic alternating in one direction at a time. During trenching operations, steel plates would be readily available for use in front of private driveways. Each resident crossing is unique and is dependent on the actual size of the trench, topography, and facilities to determine

how many steel plates would be required and the time required for installation. However, most typical steel plates can be installed for temporary access within a 5- to 10-minute timeframe. In some instances, construction may occur in one half of the driveway at a time as to not affect ingress and egress on the side. Construction vehicles would require both lanes of traffic to be closed temporarily for short durations. However, during an emergency, construction vehicles and equipment would be moved off the road to allow emergency vehicles access to any given property.

- d. *Describe the potential road closure scenarios on along East Cox Road, McDonald Road, and Day Valley Road during construction – what is the maximum amount of time that the road could be closed?*

PG&E's Response

In response to Data Request 8, PG&E described the potential road closure scenarios along East Cox Road, McDonald Road, and Day Valley Road. The following is a summary of the potential road-closure scenarios during construction of the underground alternative.

The construction methods that would be used for the installation of the underground facilities—which include the removal of pavement, trench excavation, concrete pouring, and asphalt paving restoration—would require temporary closures along East Cox Road, McDonald Road, and Day Valley Road. PG&E would obtain an encroachment permit from the County and implement temporary lane closures (or partial lane closures) in accordance with the encroachment permit requirements. These requirements would include protection of traffic by using warning signs, lights, and barricades. As previously discussed, steel plates would be utilized, as needed, to maintain access to properties. At vault locations, traffic would be flagged, with traffic alternating in one direction at a time. In addition to partial lane closures, temporary and total road closures would also be required on East Cox Road, McDonald Road, and Day Valley Road during duct bank excavation, installation, backfill, and resurfacing. It is anticipated that approximately 65 days of total road closures would be required on East Cox Road. Approximately 50 days would be required on McDonald Road and Day Valley Road. The closure of East Cox Road would not occur until construction on McDonald Road and Day Valley Road was completed. The anticipated road closures are described in more detail in the subsections that follow. Preliminary discussions with the County's Public Works Department indicate that work hours would be restricted to between 8:30 a.m. and 4:30 p.m.

East Cox Road

East Cox Road would be completely closed for approximately 1,900 feet from Day Valley Road to PG&E's proposed Pole C-89 (near the County's water pump station) for approximately 65 days during duct bank excavation, installation, backfill, and resurfacing. An additional 175 days of temporary lane closures would also be required for all other construction activities. Access during this closure would be limited to residents, first responders, police, fire, and ambulances between 8:30 a.m. and 4:30 p.m.

McDonald Road and Day Valley Road

McDonald Road and a short portion of Day Valley Road (approximately 550 feet) would also be completely closed for approximately 50 days from Freedom Boulevard to East Cox Road (approximately 2,800 feet) during duct bank excavation, installation, backfill, and resurfacing. As with East Cox Road, an additional 150 days of temporary lane closures would also be

required. Access during this closure would be limited to residents, first responders, police, fire, and ambulances between 8:30 a.m. and 4:30 p.m.

Table 1: Summary of Anticipated Temporary Road Closures provides a summary of anticipated road closures during construction activities. Road closures would be phased so that temporary closures along East Cox Road would not occur until construction activities on McDonald Road and Day Valley Road were completed. All roads would be restored with asphalt paving and re-striping in accordance with the County's requirements. PG&E would provide traffic controls and/or use flaggers and would obtain encroachment permits from the County, as required.

- e. Describe the safety/access measures that PG&E will implement to ensure emergency services during road closures, including measures for residences and the coordination with the local emergency service providers.*

PG&E's Response

During construction, all roads would be temporarily impacted and would require coordination between PG&E and applicable emergency service providers at least 24 hours prior to road closures. During construction, ingress and egress would be provided from at least one direction, except in instances where complete road closures would be required, as discussed previously. During complete road closures, PG&E would coordinate in advance with emergency providers to identify alternative routes of travel. As previously discussed, steel plates would be utilized, as needed, to maintain access in the project area. Typical steel plates can be installed for temporary access within a 5- to 10-minute timeframe. However, the two deep storm drain culverts at the bottom of Cox Road and the adjacent drain on Day Valley Road would require deep excavations, which would not be possible to plate quickly. In these locations, emergency providers would be advised that access across these locations would be restricted and alternate access should be used. A PG&E-designated contractor would be on site at all times during construction to facilitate emergency vehicle access, as required. This person would have direct phone contact with the local emergency network to provide the earliest notice should access to the work site become necessary. The PG&E-designated contractor would also work directly with the construction foreman to ensure all equipment and obstructions are removed in a timely manner for emergency access. This person would also be responsible for maintaining access for non-essential personnel, pedestrians, and bicycles during construction hours.

Table 1: Summary of Anticipated Temporary Road Closures

Construction Activity	Approximate Duration of Work	Traffic Impact
East Cox Road		
Riser site preparation	35 days	Closure of one lane with flaggers
Riser foundation excavation	5 days	Closure of one lane with flaggers
Riser foundation installation	5 days	Closure of one lane with flaggers
Riser structure installation	10 days	Closure of one lane with flaggers
Riser fencing	10 days	Closure of one lane with flaggers
Vault excavation/shoring	12 days (3 days per vault)	Closure of one lane with flaggers
Vault installation	12 days (3 days per vault)	Closure of one lane with flaggers
Vault precast neck installation	4 days (1 day per vault)	Closure of one lane with flaggers
Vault cast neck ring installation	4 days (1 day per vault)	Closure of one lane with flaggers
Vault backfill and shoring removal	8 days (2 days per vault)	Closure of one lane with flaggers
Vault resurfacing	8 days (2 days per vault)	Closure of one lane with flaggers
Duct bank excavation	50 days	Complete road closure
Duct bank installation		
Duct bank backfill		
Duct bank resurfacing	15 days	Complete road closure
Cable racking	12 days (3 days per vault)	Closure of one lane with flaggers
Cable pulling	5 days per section	Closure of one lane with flaggers
Cable splicing	28 days (7 days per vault)	Closure of one lane with flaggers
Cable terminations	7 days	Closure of one lane with flaggers
McDonald Road and Day Valley Road		
Riser site preparation	15 days	Closure of one lane with flaggers
Riser foundation excavation	5 days	Closure of one lane with flaggers
Riser foundation installation	5 days	Closure of one lane with flaggers
Riser structure installation	10 days	Closure of one lane with flaggers

Construction Activity	Approximate Duration of Work	Traffic Impact
Riser fencing	5 days	Closure of one lane with flaggers
Vault excavation/shoring	12 days (3 days per vault)	Closure of one lane with flaggers
Vault installation	12 days (3 days per vault)	Closure of one lane with flaggers
Vault precast neck installation	4 days (1 day per vault)	Closure of one lane with flaggers
Vault cast neck ring installation	4 days (1 day per vault)	Closure of one lane with flaggers
Vault backfill and shoring removal	8 days (2 days per vault)	Closure of one lane with flaggers
Vault resurfacing	8 days (2 days per vault)	Closure of one lane with flaggers
Duct bank excavation	35 days	Complete road closure
Duct bank installation		
Duct bank backfill		
Duct bank resurfacing	15 days	Complete road closure
Cable racking	12 days (3 days per vault)	Closure of one lane with flaggers
Cable pulling	5 days per section	Closure of one lane with flaggers
Cable splicing	28 days (7 days per vault)	Closure of one lane with flaggers
Cable terminations	7 days	Closure of one lane with flaggers

In accordance with the Traffic Management Plan, a basic set of parameters would be provided to ensure access and safety, such as the following:

- standard safety practices utilizing road barriers in front of work zones,
 - flaggers and/or signage to guide essential vehicles through and around construction activities,
 - vehicle speed signs, and
 - re-routing non-essential vehicles with detour signs and routes.
- f. Describe the safety/access measures that PG&E will implement for school children traveling to school or returning home after the start and/or before the end of the construction work day.*

PG&E's Response

School busses would be treated similarly to emergency vehicles and residents, and would be allowed to enter the work zone through coordination with PG&E's designated personnel. In the event that an open trench or other major obstruction is located between the ingress and egress of the school bus and the bus stop location, appropriate measures—such as steel plating or a wooden platform bridge—would be implemented to allow safe access for children and caregivers, as needed. Regular informational meetings regarding the scheduled construction activities would be held with local residents to determine the school bus schedule and the safest appropriate means to allow children to access the busses.

- g. Clarify whether the underground work would be simultaneous with the overhead work and whether the 17 months within a 22-month window construction schedule applies only to the undergrounding portion or the entire alternative (including the overhead).*

PG&E's Response

The overhead transmission line work would occur simultaneously with the underground transmission line work. Both activities would share the Amesti Road site lay-down area. The 17 months within a 22-month window applies only to the underground construction schedule.

- h. Describe the potential road closure scenarios for operation/maintenance activities such as inspections; specifically, frequency, duration, and access/safety impacts from road closures*

PG&E's Response

Following completion of construction and circuit energization, PG&E operation and maintenance personnel would monitor, maintain, inspect, and test the cable circuit as required. Operation and maintenance activities consist of two types of procedures—closed-circuit inspection and open-circuit inspection—and both would be completed during daytime hours. The closed-circuit inspection is strictly visual; however, it would require the use of equipment and traffic control. Open-circuit inspections require additional inspection and testing activities, and therefore, traffic control would be required. The following subsections provide a more detailed discussion of closed-circuit and open-circuit inspections.

Closed-Circuit Inspections (In Operation)

Visual inspections would be required twice a year for the first 3 years. The riser pole structures would be visually inspected for fluid leaks, bonding cable attachments, grounding connections, steel corrosion, steel deflection, etc. During this procedure, one-lane road closures could be required. The vaults would require visual inspections for steel corrosion, deflection of the splice supports, and major movement of the cable splices. During this procedure, one-lane road closures would be required for inspection equipment. PG&E personnel would not enter the vault during this inspection; rather, the vaults would be visually inspected through the vault neck at the manhole entrances. Other visual inspections, such as driving the route, would not adversely affect the public. A summary of the potential road closure scenarios for operation and maintenance activities is provided in Table 2: Potential Road Closure Scenarios for Operation and Maintenance Activities.

Open-Circuit Inspections (Out of Operation)

The following additional work is required once a year for the first 3 years. Termination inspection of ground lugs, cable splice clamps, and other bolts would be verified for torque values. Additional and more detailed visual inspections would be required for small leaks at the base of the terminators, damage of the terminators' outer casing, thermal mechanical movement imposed on the cable jacket, and cable clamp interface and snaking (or bending) of the cable that exceeds specified tolerances. Link boxes containing the surge voltage limiters (SVL) or direct ground links would also be opened and visually inspected.

Vault inspections would also be required for verification of torque values of the cable clamps, thermal mechanical movement imposed on the cable jacket, and cable clamp interface and snaking/bending of the cable that exceeds specified tolerances. Link boxes within the vaults would also be visually inspected. In addition, any cracks or settling of the concrete vault, or corrosion, would require documentation.

Jacket Integrity Testing is required on the cable system, and each termination and all vaults would be opened and ready for the testing at the same time. All link boxes would be opened and SVLs, along with ground links, would be removed in preparation for the testing. This would require multiple traffic controls, as stated previously, at each location. A direct-current voltage of 5,000 to 15,000 volts is placed on the cable sheath to ensure the integrity of the cable's outer jacket. Other electrical testing on the cable circuit does not require traffic control and is conducted at the substations.

Regular operation and maintenance of the vaults would not conflict with emergency, residential, or school bus access, as one full lane would be accessible at all times. A summary of the potential road closure scenarios for operation and maintenance activities is provided in Table 2: Potential Road Closure Scenarios for Operation and Maintenance Activities.

Table 2: Potential Road Closure Scenarios for Operation and Maintenance Activities

Location	Schedule	Impacts	Approximate Duration (days)
Closed-Circuit Inspections (in operation) – First 3 years			
Southern Riser Pole	April	One lane closure, noise	0.5
Northern Riser Pole	April	One lane closure, noise	0.5
Vault 1	April	One lane closure, noise	0.5
Vault 2	April	One lane closure, noise	0.5
Vault 3	April	One lane closure, noise	0.5
Vault 4	April	One lane closure, noise	0.5
Southern Riser Pole	August	One lane closure, noise	0.5
Northern Riser Pole	August	One lane closure, noise	0.5
Vault 1	August	One lane closure, noise	0.5
Vault 2	August	One lane closure, noise	0.5
Vault 3	August	One lane closure, noise	0.5
Vault 4	August	One lane closure, noise	0.5
Open-Circuit Inspections (out of operation) – First 3 years; then once every 3 years			
Southern Riser Pole	December	One lane closure, noise	5 All locations at the same time
Northern Riser Pole	December	One lane closure, noise	
Vault 1	December	One lane closure, noise	
Vault 2	December	One lane closure, noise	
Vault 3	December	One lane closure, noise	
Vault 4	December	One lane closure, noise	

Note: This schedule is for illustrative purposes only and does not reflect the actual dates that work would be performed.

- i. *Please provide GIS files of the underground alignment section – specifically the location of the riser poles, retaining walls, and vaults located off of the roadway.*

PG&E's Response

A summary table of the GIS layers for Alternative 4D (Undergrounding Cox Road, Day Valley Road, and McDonald Road Segments) is provided in Attachment B: GIS Data Transfer Summary. The GIS shapefiles are included with this submittal in the file named “Santa Cruz_Data_Request_10_Shapefiles_Alt_4D.”

CPUC Data Request Question #9

For Alternative 4C (West Cox Road), please provide the length of the alignment that would be located outside of existing ROW.

PG&E's Response

PG&E has no right-of-way (ROW) along the West Cox Road alignment that is suitable for a 115 kV power line. PG&E estimates that approximately 1.65 miles of new ROW would be necessary using the West Cox-Valencia Road-Freedom Boulevard alignment to interconnect at Rob Roy Substation. Approximately 0.3 mile of the alignment would require a new 60-foot ROW. The majority of this ROW (approximately 1.35 miles) would require an additional approximately 30-foot ROW adjacent to the existing roadways.

CPUC Data Request Question #10

For Alternative 4E (White Road), please provide confirm that this alternative may displace one residence on Bens Way and two residences on White Road as a result of the new ROW required but the line could be located to avoid direct impacts to these residences. Please provide information on whether these residences would be impacted.

PG&E's Response

At this time, PG&E believes that the residences on Bens Way and White Road are located 150 to 200 feet from the proposed alignment, and outside of the approximately 60-foot easement needed to accommodate CPUC General Order 95 clearance requirements for a single-circuit 115 kV line. PG&E does not anticipate that the three homes would need to be removed. However, a survey would need to be conducted to confirm that the residences are located outside of the easement.

CPUC Data Request Question #11

For Alternative 4F (power corridor west of Highway 1), please provide the length of the alignment that would be located outside of existing ROW.

PG&E's Response

PG&E has no ROW along the Power Corridor West of Highway 1 alignment that is suitable for a 115 kV power line. PG&E estimates that approximately 9 miles of new ROW would be necessary. Approximately 2.22 miles of the alignment would require a new, approximately 60-

foot ROW. The remaining approximately 6.82 miles would follow established roadways and would require approximately 30 feet of additional ROW.

We trust that the information provided herein is fully responsive to your requests. Should you have any further questions, please do not hesitate to contact me at (415) 973-7475.

Sincerely,

A handwritten signature in blue ink, appearing to read 'M. Fogelson', with a long horizontal flourish extending to the right.

Matthew Fogelson
Attorney

ATTACHMENT A: PRELIMINARY DELINEATION OF WATERS OF THE UNITED STATES

Preliminary Delineation of Waters of the United States

Santa Cruz 115 kV Reinforcement Project



Prepared for:



Prepared by:



July 2013

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ACRONYMS AND ABBREVIATIONS

CFR	Code of Federal Regulations
CWA	Clean Water Act
EPA	U.S. Environmental Protection Agency
FAC	Facultative
FACU	Facultative Upland
FACW	Facultative Wetland
GPS	global positioning system
msl	mean sea level
NL	Not Listed
NRCS	Natural Resources Conservation Service
OBL	Obligate
OHWM	Ordinary High Water Mark
PG&E	Pacific Gas and Electric Company
RPW	Relatively Permanent Water
SP	stock pond
SW	seasonal wetland
TNW	Traditional Navigable Water
TSP	tubular steel pole
UPL	Upland
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WSS	Web Soil Survey

1. INTRODUCTION

Pacific Gas and Electric Company (PG&E) is planning to increase transmission system reliability in the Santa Cruz area to avoid power outages. The Santa Cruz 115 kV Reinforcement Project (project) will add a second 115 kV circuit between Green Valley Substation and Rob Roy Substation to prevent potential large-scale service interruptions if overlapping outages occur in the local electricity supply system. The project includes converting the existing 7.1 miles of single-circuit 115 kV power line to a double-circuit 115 kV power line by replacing existing wood poles with tubular steel poles (TSPs); constructing a new, approximately 1.7-mile-long single-circuit 115 kV power line, connecting the Green Valley-Camp Evers 115 kV Power Line to Rob Roy Substation; and expanding the Rob Roy Substation to accommodate the new circuit.

The new circuit will provide two sources of power in the event of an outage on either the southern line between Green Valley Substation and Rob Roy Substation or the existing northern line between Green Valley Substation and Camp Evers Substation.

1.1 Project Description

The project is located in southern Santa Cruz County, California, near the cities of Watsonville and Aptos. The primary project components are summarized as follows (CPUC 2012):

1. **Northern Alignment:** Approximately 7.1 miles of an existing single-circuit 115 kV power line will be converted to a double-circuit 115 kV power line by replacing existing wood poles with TSPs.
2. **Cox-Freedom Segment:** A new, approximately 1.7-mile-long single-circuit 115 kV power line, connecting the Green Valley-Camp Evers 115 kV Power Line to Rob Roy Substation, will be constructed in an existing distribution line alignment by installing new poles and co-locating some existing distribution facilities.
3. **Rob Roy Substation Modifications:** The existing substation will be expanded to accommodate the new circuit.
4. **Rob Roy Substation Connections:** One new TSP will be installed and two existing power poles will be replaced with TSPs to accommodate the interconnection of existing power lines following modifications of Rob Roy Substation.

1.2 Study Area Description

PG&E identified two locations along the project alignment with potential wetlands or waters of the United States that could be affected by the project. Thus, the wetland delineation study area encompasses these two areas, which constitute a small portion of the project alignment, with potential wetland and water features.

As shown in Figure 1: Project Vicinity Map, the study area is located in unincorporated Santa Cruz County, north of the City of Watsonville; it comprises 4.47 acres with elevation of between approximately 145 and 200 feet above mean sea level (msl). Land uses include agricultural and developed. The study area is located on the U.S. Geological Survey (USGS) Watsonville West 7.5-minute quadrangle, as shown in Figure 2: Topographic Study Area Map, is not subdivided into sections under the Public Land Survey System (CDFW 2013), and is made up of two separate locations:

- **Location E-10:** covers 4.26 acres and encompasses a portion of the project alignment with pole work areas and overland access routes.
- **Culvert Location:** covers 0.21 acres and encompasses a location where a culvert will be replaced to allow construction vehicles access to the project work area.

1.2.1 Climate

Per historical data from the City of Watsonville, which is approximately 1.8 miles south of the study area, this region typically receives approximately 22 inches of rainfall each year, with January having the most rain on average (NCDC 2013). The field survey for the wetland delineation was conducted on June 10, 2013; at the time, skies were clear and air temperatures ranged from 63 to 66 degrees Fahrenheit (NCDC 2013). Precipitation recorded in the 2013 water year through the date of field work (June 10) was 13.9 inches (NCDC 2013). Relative to the normal precipitation, which averages approximately 22 inches during the water year at this location, the total precipitation near the study area during the 2013 water year was less than normal.

2. REGULATORY FRAMEWORK

2.1 United Army Corps of Engineers Definition of Waters of the United States, including Wetlands

Any wetland or other waters meeting the following criteria described in 33 Code of Federal Regulations (CFR) 328.3 were preliminarily determined to be jurisdictional waters of the United States:

- 1) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters, which are subject to the ebb and flow of the tide.
- 2) All interstate waters, including interstate wetlands.
- 3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:
 - a) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or





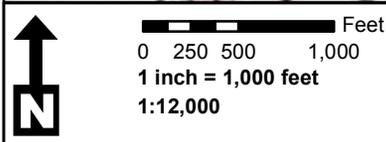
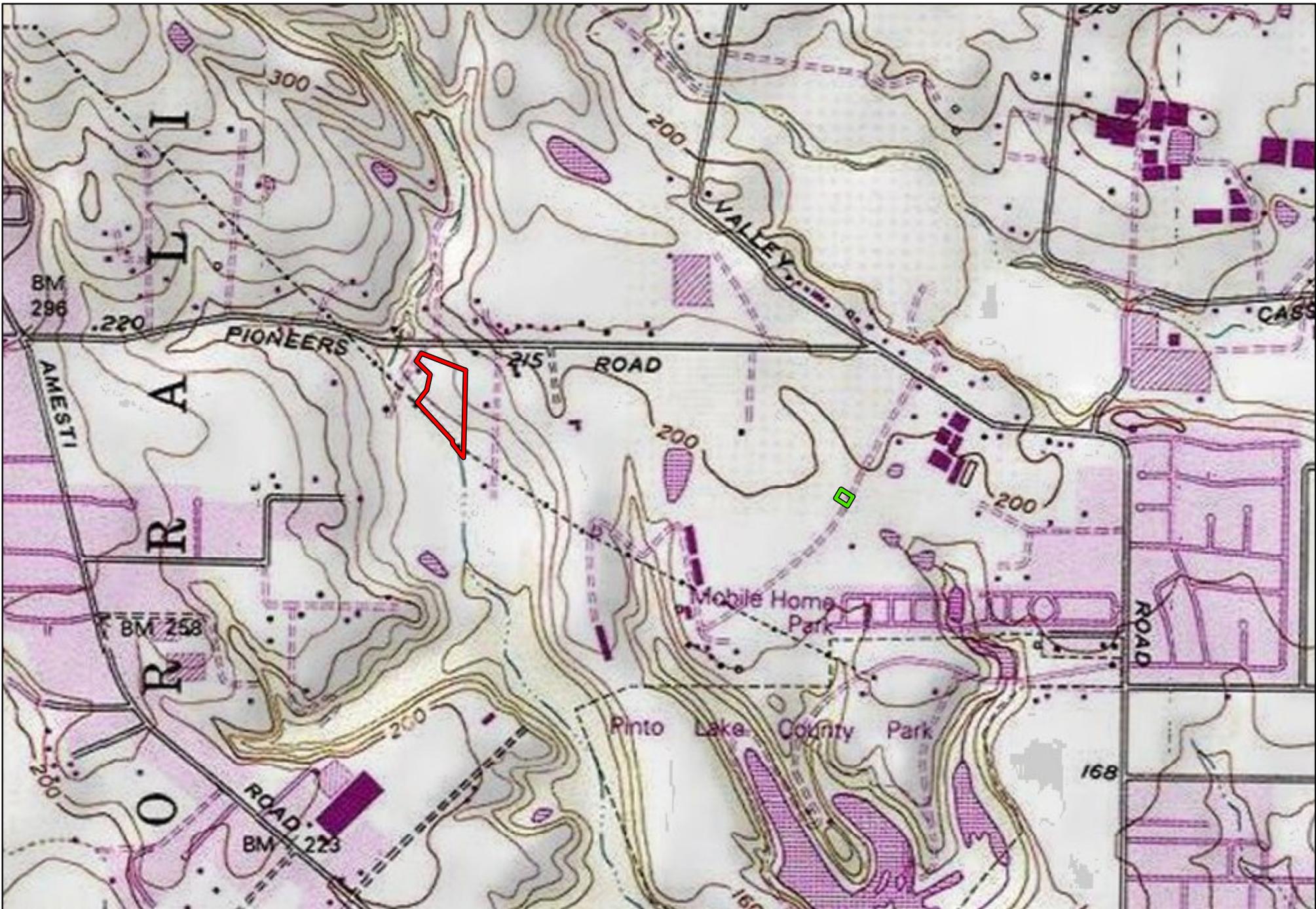
 Feet
 0 750 1,500 3,000
 1 inch = 3,000 feet
 1:36,000


 Pacific Gas and Electric Company

Study Area
 Location E-10
 Culvert Location

Source: AECOM 2013
Base Image: ESRI 2013

Santa Cruz 115 kV Reinforcement Project
 Figure 1: Project Vicinity Map
 July 2, 2013



Study Area
 Location E-10
 Culvert Location

Source: AECOM 2013
 Base Image: USGS 1994 Watsonville
 West Quadrangle, 7.5-Minute Series

Santa Cruz 115 kV Reinforcement Project
 Figure 2: Topographic Study Area Map
 June 25, 2013

- b) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
 - c) Which are used or could be used for industrial purpose by industries in interstate commerce.
- 4) All impoundments of waters otherwise defined as waters of the United States under the definition.
 - 5) Tributaries of waters identified in paragraphs (a) (1) through (4) of 33 CFR 328.3.
 - 6) The territorial seas.
 - 7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) (1) through (6) of 33 CFR 328.3.

3. DELINEATION METHODS

3.1 General Methods

Kristina Bischel and Charles Battaglia conducted a delineation of wetlands and waters of the United States within the study area on June 10, 2013. The *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (Version 2.0) (Environmental Laboratory 2008) were used to delineate wetlands that are potentially subject to U.S. Army Corps of Engineers (USACE) jurisdiction under Section 404 of the Clean Water Act (CWA). The 1987 manual and 2008 Arid West Supplement provide technical guidelines and methods for the three-parameter approach to determining the location and boundaries of jurisdictional wetlands. This approach requires that an area supports positive indicators of hydrophytic vegetation, hydric soils, and wetland hydrology to be considered a jurisdictional wetland. Routine wetland determination data forms were completed for five sample points, and they are provided in Appendix A: Data Forms. Potentially jurisdictional areas were identified and mapped in the field. Sample point locations also were recorded digitally, using a global positioning system (GPS) data logger (Trimble XH), and were imported onto an electronic version of the aerial photograph. GPS data were recorded in North American Datum 83. Botanical nomenclature follows *The Jepson Manual: Vascular Plants of California*, second edition (Baldwin et al. 2012).

To determine whether hydrophytic vegetation dominated the area, plant species at sample sites were listed on data forms and the wetland indicator status was recorded for the dominant species using the USACE's *National Wetlands Plant List: California 2012 Final State Wetland Plant List* (Lichvar and Kartesz 2012). Hydrophytic species include those listed as obligate (OBL), facultative wetland (FACW), or facultative (FAC). The designation of a species corresponds to the probability that the species will occur in a wetland habitat. The indicator categories are defined as listed in Table 1: Wetland Indicator Categories.

Waters of the United States were delineated based on the ordinary high water mark (OHWM). OHWMs for drainages typically correspond with characteristics such as shelving, scour lines,

and other natural linear features which define the bed and bank portion of the channel that floods under normal conditions (USACE 2005).

Table 1: Wetland Indicator Categories

Indicator Category	Wetland Occurrence
Obligate Wetland (OBL)	Almost always occurs in wetlands
Facultative Wetland (FACW)	Usually occurs in wetlands, but may occur in non-wetlands
Facultative (FAC)	Occurs in wetlands or non-wetlands
Facultative Upland (FACU)	Usually occurs in non-wetlands, but may occur in wetlands
Obligate Upland (UPL)	Almost never occurs in wetlands ¹
Note: ¹ Plants not listed on the 2012 National Wetland Plant List are labeled as NL and assumed to be UPL. Source: Lichvar et al. 2012	

Soils were examined by digging soil test pits to determine whether hydric soils existed in a sampling location. Soils were described in terms of depth, matrix color, redoxymorphic color (when present), and moisture status at each sampling location. Other diagnostic features indicative of hydric soils, such as the presence of concretions and oxidized rhizospheres (a redoximorphic feature, according to Vepraskas [1992]), also were recorded on data forms. Hydric soil determinations were based on the indicators provided by the 1987 Wetlands Delineation Manual, 2008 Arid West Supplement, the *Field Indicators of Hydric Soils in the United States: A Guide for Identifying and Delineating Hydric Soils* (NRCS 2010), and Vepraskas (1992). Soil units mapped for the study area as part of the soil survey were cross-referenced with The National Hydric Soils List by State (NRCS 2012b) to determine whether the soils were listed as a hydric map unit.

The USACE’s *Jurisdictional Determination Form Instructional Guidebook* was consulted to aid the preliminary determination that an area would be subject to USACE jurisdiction under Section 404 of the CWA (USACE 2007). The significant nexus test—outlined in a memorandum jointly authored by the U.S. Environmental Protection Agency (EPA) and USACE—was applied to each potentially jurisdictional habitat type (Grumbles and Woodley 2008). To facilitate jurisdictional determinations consistent with the guidance, each waterbody delineated was evaluated as a Traditional Navigable Water (TNW), Relatively Permanent Water (RPW), or non-RPW based on the following definitions:

- TNWs include all waters subject to the ebb and flow of the tide, or waters that are presently used, have been used in the past, or may be used in the future to transport interstate or foreign commerce, and all waters that are navigable in fact under federal law for any purpose.
- RPWs are waters that flow continuously at least seasonally (typically at least 3 months of the year) and are not TNWs.

- Non-RPWs are waters that do not have continuous flow at least seasonally.

The following types of waterbodies are subject to the CWA:

- all TNWs and adjacent wetlands;
- relatively permanent tributaries of TNWs and wetlands with a continuous surface connection to such tributaries; and
- non-relatively permanent tributaries of TNWs and adjacent wetlands if they have a significant nexus to a TNW. Non-RPWs and adjacent wetlands are determined to have a significant nexus to a TNW if they significantly affect the chemical, physical, or biological integrity of a downstream TNW.

Delineation sample sites are shown on an overview map of the study area, in the wetland delineation maps provided in Appendix D: Wetland Delineation Maps; sample sites are cross-referenced to the wetland determination data forms provided in Appendix A: Data Forms. Habitat descriptions are further described herein, and habitat types are shown on the map provided in Appendix B: Habitat Map. Representative photographs of the study area are provided in Appendix C: Site Photographs and a list of vegetation observed during the field survey is provided in Appendix E: Species Observed.

A pre-field review of the study area was conducted to identify potential wetlands and other waters, as well as to collect information on hydrophytic vegetation, hydric soils, and wetland hydrology. Existing materials reviewed included online geospatial wetlands information provided by the U.S. Fish and Wildlife Service (USFWS) wetlands mapper (USFWS 2012), and aerial photography of the study area (Google Earth 2012). The Watsonville West USGS 7.5-minute topographic quadrangle map (USGS 2012) also was reviewed. Soil types in the study area were identified using the Web Soil Survey (WSS), a resource provided by the National Resources Conservation Service (NRCS) (NRCS 2012a).

4. STUDY RESULTS

4.1 Vegetation

The study area is composed of annual grassland, ponds, and seasonal wetland. Additionally, developed areas are present within the study area. A habitat map is provided in Appendix B: Habitat Map, representative photographs of the study area are provided in Appendix C: Site Photographs, and a list of vegetation observed at the time of the field survey is provided in Appendix E: Species Observed.

4.2 Hydrology

The study area is located within the USGS Pajaro Hydrologic Unit Code 18060002 (USGS 2013), and more specifically, within the Pajaro River Watershed (County of Santa Cruz 2012). The water features in the study area receive some of the water from direct precipitation, although

the majority of the water comes from other sources including an on-site well and two artificially controlled ponds at location E-30 and agricultural runoff at the culvert location.

With regards to location E-30, the two ponds appear to be filled purposefully by the property tenants to provide drinking water for stock (goats, sheep, and cattle), and a seasonal wetland on site appears to be fed by underground flow from Stock Pond 1 (SP1) and/or leaky well equipment. The stock ponds and seasonal wetland are located adjacent to an RPW that drains to Pinto Lake, a TNW.

With regards to the culvert location, the ditch mainly receives agricultural runoff water, which is then conveyed downstream through the drainage, a series of small ponds, and eventually into Pinto Lake.

4.3 Soils

According to the NRCS Soil Survey (NRCS 2012b), the study area has two soil types. The portion of the study area at the culvert location is Watsonville Loam, Thick Surface, 0-2 percent slopes, and the portion of the study area at Location E-10 is Watsonville Loam, 2-15 percent slopes. Both soils are hydric according to The National Hydric Soils List (NRCS 2012b). According to this list, approximately 88 percent of both map units contain hydric components—Watsonville soils and Watsonville thick surface soils—located in marine terraces (NRCS 2012a). The study area has an elevation that ranges between 145 and 200 feet above msl, part of which is annual grassland and part of which is agricultural and developed. The soil profile in agricultural areas may not be intact, but the same soil may still be present at the site. The undeveloped areas (agricultural and annual grassland) are likely to contain hydric soils, as defined by The National Hydric Soils List (NRCS 2012a). Soil types in the study area are shown in Figure 3: Soils Map.

4.3.1 Map Unit 177—Watsonville Loam, 2-15 percent slopes

These soils are found at elevations between 20 and 1,200 feet, on marine terraces with slopes of 2 to 15 percent. The map unit includes 85 percent Watsonville and similar soils, and 15 percent other minor components including Elkhorn sandy loam (5 percent), Pinto loam (4 percent), Watsonville thick surface (3 percent), Cropley silty clay (1 percent), Danville (1 percent), and Elder (1 percent). These are somewhat poorly drained soils. A restrictive layer, if present, is located more than 80 inches below the soil surface. Typically, this soil would be composed of loam to a depth of 18 inches, of clay or clay loam soils between 18 and 39 inches in depth, and of sandy clay loam or clay loam between 39 and 63 inches in depth. This map unit is listed as hydric on The National Hydric Soils List (NRCS 2012b).

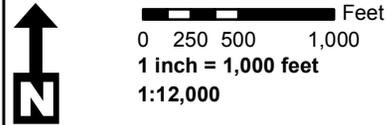
4.3.2 Map Unit 178—Watsonville Loam, Thick Surface, 0-2 percent slopes

These soils are found at elevations between 20 and 1,200 feet, on marine terraces with slopes of 0 to 2 percent. The map unit includes 85 percent Watsonville and similar soils, and 14 percent other minor components including Elkhorn sandy loam (5 percent), Pinto loam (4 percent), Watsonville thick surface (3 percent), and Danville loam (2 percent). These are somewhat poorly drained soils. A restrictive layer, if present, is located more than 80 inches below the soil surface.



Watsonville loam
2-15 percent slopes

Watsonville loam, thick surface
0 to 2 percent slopes



Study Area		Soil Type	
	Location E-10		Watsonville loam
	Culvert Location		Watsonville loam, thick surface

Source: AECOM 2013; U.S. Department of Agriculture, Natural Resources Conservation Service
Base Image: ESRI 2010

Santa Cruz 115 kV Reinforcement Project
Figure 3: Soils Map
June 25, 2013

Typically, this soil would be composed of loam to a depth of 18 inches, of clay or clay loam soils between 18 and 39 inches in depth, and of sandy clay loam or clay loam between 39 and 63 inches in depth. This map unit is listed as hydric on The National Hydric Soils List (NRCS 2012b).

5. DELINEATION FINDINGS

As summarized in Table 2: Potentially Jurisdictional Features, the 4.47-acre study area contains approximately 0.43 acres of potentially jurisdictional waters of the United States (including wetlands), which include a seasonal wetland, an agricultural ditch, and two ponds potentially subject to USACE jurisdiction, pursuant to Section 404 of the CWA.

This section discusses the results of the delineation of waters of the United States, as defined by the USACE under Section 404 of the CWA, for the study area. This document is considered a draft until it is verified by the San Francisco District of the USACE. The maps provided in Appendix D: Wetland Delineation Maps were prepared in accordance with the Draft Map and Drawing Standards for the South Pacific Regulatory Program, Special Public Notice (USACE 2012). These maps can be used by PG&E to obtain a preliminary jurisdiction determination from the San Francisco District of the USACE, as described under Regulatory Guidance Letter 08-02 (USACE 2008).

5.1 Jurisdictional Habitat Types

5.1.1 Waters of the United States

Waters of the United States within the study area include 0.03 acre of RPW, 0.02 acre of seasonal wetland (SW), and 0.38 acre of stock pond (SP), totaling approximately 0.43 acre of potentially jurisdictional features. These features are summarized in Table 2: Potentially Jurisdictional Features.

Table 2: Potentially Jurisdictional Features

Feature	Acreage
Wetlands Abutting or Adjacent to Relatively Permanent Water	
Seasonal Wetland 1 (SW1)	0.015
Other Waters of the United States	
Relatively Permanent Water 1 (RPW1)	0.033
Stock Pond 1 (SP1)	0.195
Stock Pond 2 (SP2)	0.189
TOTAL POTENTIALLY JURISDICTIONAL FEATURES	0.43¹
Note: ¹ Acreage in the thousandth decimal place is not included in the total acreage reported in the total column. Source: Data compiled by AECOM in 2013	

5.1.2 Wetlands Abutting or Adjacent to Relatively Permanent Waters

Seasonal Wetland

Seasonal wetland habitat is characterized using the Cowardin classification system as a palustrine emergent non-persistent (PEM2) wetland. Approximately 0.02 acre of this wetland type is found in the Location E-30 study area. The seasonal wetland (SW1) is located between the two stock ponds within the Location E-30 study area. This feature originates near the edge of SP2 and the base of well equipment, and continues downhill towards SP1. The feature is dominated by hydrophytic vegetation, including rabbitsfoot grass (*Polypogon monspeliensis*) (FACW), pennyroyal (*Mentha pulegium*) (OBL), Italian ryegrass (*Festuca perrenis*) (FAC), and tall flatsedge (*Cyperus eragrostis*) (FACW). Soils in this area met the redox dark surface indicator (F6). The hydrology criterion was met because of the presence of oxidized rhizospheres along living roots. Thus, SW1 meets the USACE three-parameter criteria for wetlands, contributes surface and subsurface flow to SP1, and also is considered adjacent to the nearby RPW. The RPW discharges downstream to Pinto Lake, a TNW. This feature likely would be considered subject to USACE jurisdiction, pursuant to Section 404 of the CWA. Further details regarding SW1 are included in the data form for Sampling Point 2, provided in Appendix A: Data Forms.

Stock Ponds

Stock ponds are characterized using the Cowardin classification system as a lacustrine. At Sampling Point 1, which was taken in the only vegetated portion of SP1, it is classified as lacustrine littoral aquatic bed habitat. Further details regarding SP1 are provided in the data form for Sampling Point 1 in Appendix A: Data Forms. Approximately 0.38 acre of stock ponds is present within the Location E-30 study area. The two stock ponds—SP1 and SP2—are mostly devoid of vegetation and are characterized by open standing water. SP1, however, has hydrophytic vegetation at its north end. Species present included floating marsh pennywort (*Hydrocotyle ranunculoides*) (OBL), pennyroyal, and rabbitsfoot grass. Hydrophytic soils were assumed because of obvious hydrophytic vegetation and wetland hydrology (standing water). Although this northern portion of the pond qualifies as a wetland because it meets USACE criteria, the stock ponds are considered other waters of the United States because they are mostly devoid of vegetation and have OHWMs. The ponds are located adjacent to an RPW shown on Figure 2: Topographic Study Area Map, and SP1 and SP2 likely have underground water connections with each other as well as with the adjacent RPW. SP2 is slightly uphill from SP1, and SP1 appears to overflow into the riparian zone next to the RPW. The RPW discharges downstream to Pinto Lake, a TNW. Thus, the ponds may have an effect on the RPW and downstream waters because of subsurface connections and aboveground overflow from SP1, and therefore SP1 and SP2 likely are subject to USACE jurisdiction, pursuant to Section 404 of the CWA.

Relatively Permanent Waters

An agricultural ditch that is an RPW—RPW1—is located within the culvert location. Approximately 0.03 acre of this water feature is present within the study area, and the entire ditch feature is characterized by hydrophytic vegetation below the OHWM. Because of the freshwater marsh habitat present within the study area, this feature is characterized using the Cowardin classification system as a palustrine emergent persistent wetland. The agricultural

ditch crosses beneath Kliewer Lane through a culvert, and emergent freshwater vegetation is present within the ditch along both sides of Kliewer Lane in the study area. Dominant hydrophytic plant species present within the ditch include broadleaf cattail (*Typha latifolia*) (OBL), tule (*Schoenoplectus* sp.) (OBL), fringed willowherb (*Epilobium ciliatum*) (FACW), watercress (*Nasturtium officinale*) (OBL), and arroyo willow (*Salix lasiolepis*) (FACW). Soils in this area met the redox dark surface indicator (F6). Standing water was located within some areas in the ditch. In the soil pit, the water table was at a depth of 8 inches, and the soil was saturated to a depth of 3 inches. This feature is an RPW with a downstream direct connection to a TNW—Pinto Lake—and it also meets the USACE three-parameter criteria for wetlands. Thus, the ditch likely is subject to USACE jurisdiction, pursuant to Section 404 of the CWA. Further details regarding RPW1 are included in the data form for Sampling Point 4, provided in Appendix A: Data Forms.

5.2 Nonjurisdictional Habitats

The study area totals approximately 4.47 acres. As summarized in Table 3: Potentially Nonjurisdictional Features, approximately 4.04 acres of the study area include potentially nonjurisdictional habitats. Nonjurisdictional habitats within the study area include annual grassland, agricultural, and developed/ruderal areas. The conclusions of this report are contingent on verification by the San Francisco District of the USACE.

Table 3: Potentially Nonjurisdictional Features

Upland Habitats	Acres
Developed/Ruderal	0.150
Agriculture	0.006
Annual Grassland	3.886
Total Potentially Nonjurisdictional Features	4.04
Source: Data compiled by AECOM 2013	

Developed/Ruderal

The study area contains approximately 0.15 acres of developed areas, including gravel and dirt roads, and a small parking area. Developed and ruderal areas do not contain hydrophytic vegetation, hydric soils, or have wetland hydrology; therefore, they are not subject to USACE jurisdiction, pursuant to Section 404 of the CWA. In the study area, species found in ruderal areas include slender oat (*Avena barbata*) (not listed [NL]), English plantain (*Plantago lanceolata*) (FAC), Bristly ox-tongue (*Helminthotheca echioides*) (FACU), and wild radish (*Raphanus sativa*) (NL). Further details regarding ruderal habitat are included in the data form for Sampling Point 5, provided in Appendix A: Data Forms.

Nonnative Annual Grassland

The study area contains approximately 3.89 acres of nonnative annual grassland habitat. Within the study area, dominant grass and forb species include white clover (*Trifolium repens*) (FACU), seaside barley (*Hordeum marinum* ssp. *gussoneanum*) (FAC), and foxtail barley (*Hordeum murinum* ssp. *leporinum*) (FACU). Nonnative annual grassland habitats within the study area do not possess the three-parameter wetland criteria of having hydrophytic vegetation, hydric soil indicators, and wetland hydrology; therefore, these areas are not subject to USACE jurisdiction, pursuant to Section 404 of the CWA. Further details regarding nonnative annual grassland habitat are included in the data form for Sampling Point 4, provided in Appendix A: Data Forms.

Agriculture

The study area contains approximately 0.01 acre of agricultural areas that are located on flat, level ground and are actively cultivated. Agricultural lands within the study area do not possess the USACE wetland criteria of having hydrophytic vegetation and wetland hydrology. Although the soils in the project area are on the National Hydric Soils List (NRCS 2012b), they are not expected to exhibit hydric soil indicators. Therefore, the agricultural areas are not subject to USACE jurisdiction, pursuant to Section 404 of the CWA. No data was collected in agricultural areas.

6. JURISDICTIONAL DETERMINATION

As summarized in Table 2: Potentially Jurisdictional Features, the 4.47-acre study area contains approximately 0.43 acre of features that likely are subject to USACE jurisdiction, pursuant to Section 404 of the CWA, including:

- Two stock ponds that total approximately 0.38 acres. These ponds have a connection to an RPW and a downstream TNW.
- One RPW, which is an agricultural ditch that is dominated by a hydrophytic vegetation assemblage below the OHWM, has hydric soils, has evidence of wetland hydrology, and achieves the USACE three-parameter wetland criteria. The RPW is approximately 0.03 acre and drains to a TNW.
- One seasonal wetland that is dominated by a hydrophytic vegetation assemblage, has hydric soils, has evidence of wetland hydrology, and achieves the USACE three-parameter wetland criteria. The seasonal wetland is approximately 0.02 acre. This wetland is adjacent to an RPW that is directly connected to a downstream TNW.

The results of this delineation are contingent on verification by the San Francisco District of the USACE.

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APPENDIX A: DATA FORMS

(see PDF version for appendix)

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: PG&E Santa Cruz 115KV Reinforcement City/County: Santa Cruz Co. Sampling Date: 6-10-13
 Applicant/Owner: PG&E State: CA Sampling Point: 1
 Investigator(s): K. Bischel & C. Battaglia Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): sand on terrace Local relief (concave, convex, none): concave Slope (%): 0
 Subregion (LRR): C Lat: 36.96956 Long: -121.78374 Datum: NAD83
 Soil Map Unit Name: Watsonville loam 2-15% slopes NWI classification: L2AB

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <u>Disturbed stock pond. Standing water, hydrophytic veg, soils assumed.</u> <u>GPS: Poly 1, stock pond.</u>	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>1</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____	_____	_____	_____	
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)				Prevalence Index worksheet:
1. _____				Total % Cover of: _____ Multiply by: _____
2. _____				OBL species <u>75</u> x 1 = <u>75</u>
3. _____				FACW species <u>2</u> x 2 = <u>4</u>
4. _____				FAC species _____ x 3 = _____
5. _____				FACU species _____ x 4 = _____
_____ = Total Cover				UPL species _____ x 5 = _____
				Column Totals: <u>77</u> (A) <u>77</u> (B)
				Prevalence Index = B/A = <u>1.03</u>
Herb Stratum (Plot size: <u>5' x 5'</u>)				Hydrophytic Vegetation Indicators:
1. <u>Polygala mansuetioides</u>	<u>2</u>	<u>N</u>	<u>FACW</u>	<input checked="" type="checkbox"/> Dominance Test is >50%
2. <u>Medicago lupulina</u>	<u>15</u>	<u>N</u>	<u>OBL</u>	<input checked="" type="checkbox"/> Prevalence Index is ≤3.0 ¹
3. <u>Hydrocotyle ranunculoides</u>	<u>60</u>	<u>Y</u>	<u>OBL</u>	<input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
4. _____	_____	_____	_____	<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>77</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. _____				
2. _____				
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>23</u> % Cover of Biotic Crust _____		Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

Remarks:
Pond mostly devoid of vegetation. Veg plot taken at north end of pond that has some vegetation. Lots of downed wood.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: PG&E Santa Cruz 115kV Reinforcement City/County: Santa Cruz Co. Sampling Date: 6-10-13
 Applicant/Owner: PG&E State: CA Sampling Point: 2
 Investigator(s): K. Bischel & C. Battaglia Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): concave Slope (%): 3-4
 Subregion (LRR): C Lat: 36.96967 Long: -121.76364 Datum: NAD83
 Soil Map Unit Name: Watsonville loam, 2-15% slopes NWI classification: PEM2

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <u>Point taken in area where water appears to seep from nearby well down slope towards a stockpond. Man-made seep/seasonal wetland.</u>	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____				
2. _____				
3. _____				
4. _____				
				_____ = Total Cover
Shrub/Strawb Stratum (Plot size: _____)				
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
				_____ = Total Cover
Herb Stratum (Plot size: <u>10'x4'</u>)				
1. <u>Polypogon monspeliensis</u>	<u>30</u>	<u>Y</u>	<u>FACW</u>	
2. <u>Festuca perennis</u>	<u>40</u>	<u>Y</u>	<u>FAC</u>	
3. <u>Muntha pulegium</u>	<u>10</u>	<u>N</u>	<u>OBL</u>	
4. <u>Tritolium repens</u>	<u>1</u>	<u>N</u>	<u>FACU</u>	
5. <u>Hordeum maritimum</u>	<u>3</u>	<u>N</u>	<u>FAC</u>	
6. <u>Cyperus eragrostis</u>	<u>5</u>	<u>N</u>	<u>FACW</u>	
7. _____				
8. _____				
				<u>89</u> = Total Cover
Woody Vine Stratum (Plot size: _____)				
1. _____				
2. _____				
				_____ = Total Cover
% Bare Ground in Herb Stratum <u>20</u>	% Cover of Biotic Crust _____			
Remarks:				

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
 Total Number of Dominant Species Across All Strata: 2 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	<u>10</u>	x 1 =	<u>10</u>
FACW species	<u>35</u>	x 2 =	<u>70</u>
FAC species	<u>43</u>	x 3 =	<u>129</u>
FACU species		x 4 =	
UPL species	<u>1</u>	x 5 =	<u>5</u>
Column Totals:	<u>89</u> (A)		<u>214</u> (B)

Prevalence Index = B/A = 2.4

Hydrophytic Vegetation Indicators:
 Dominance Test is >50%
 Prevalence Index is ≤3.0¹
 Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No

SOIL

Sampling Point: 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-2	10YR 3/1	100					sandy clay	
2-10	10YR 3/1	93	7.5YR 3/6	7	C	PL/M	clay	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

Indicators for Problematic Hydric Soils³:

- 1 cm Muck (A9) (LRR C)
- 2 cm Muck (A10) (LRR B)
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1) (Nonriverine)
- Sediment Deposits (B2) (Nonriverine)
- Drift Deposits (B3) (Nonriverine)
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)

Secondary Indicators (2 or more required)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)
- Water Marks (B1) (Riverine)
- Sediment Deposits (B2) (Riverine)
- Drift Deposits (B3) (Riverine)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? Yes No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Few oxidized rhizospheres along living roots. few cracks in clay soil.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: PG&E Santa Cruz 115kV Reinforcement City/County: Santa Cruz Co. Sampling Date: 6-10-13
 Applicant/Owner: PG&E State: CA Sampling Point: 3
 Investigator(s): K. Bischel & C. Battaglia Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): none Slope (%): 1-2
 Subregion (LRR): C Lat: 36.96969 Long: -121.78362 Datum: NAD 83
 Soil Map Unit Name: Watsonville loam, 2-15% slopes NWI classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: <u>Next to wetland at sampling point 1. Some hydrophytic species, but does not meet veg, soil, and hydrology for wetlands. Upland</u>	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. _____				
2. _____				
3. _____				
4. _____				
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)				
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
_____ = Total Cover				
Herb Stratum (Plot size: <u>5' x 5'</u>)				
1. <u>Festuca perennis</u>	<u>15</u>	<u>N</u>	<u>FAC</u>	
2. <u>Mentha pulegium</u>	<u>7</u>	<u>N</u>	<u>OBL</u>	
3. <u>Hordeum murinum</u>	<u>40</u>	<u>Y</u>	<u>FAC</u>	
4. <u>Triticum repens</u>	<u>35</u>	<u>Y</u>	<u>FACU</u>	
5. <u>Lotus corniculatus</u>	<u>1</u>	<u>N</u>	<u>FAC</u>	
6. _____				
7. _____				
8. _____				
<u>98</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. _____				
2. _____				
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>5</u>	% Cover of Biotic Crust <u>0</u>			

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
 Total Number of Dominant Species Across All Strata: 2 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:
 Total % Cover of: _____ Multiply by:
 OBL species 7 x 1 = 7
 FACW species _____ x 2 = _____
 FAC species 55 x 3 = 165
 FACU species 36 x 4 = 144
 UPL species _____ x 5 = _____
 Column Totals: 98 (A) 316 (B)
 Prevalence Index = B/A = 3.22

Hydrophytic Vegetation Indicators:
 Dominance Test is >50%
 Prevalence Index is ≤3.0¹
 Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No

Remarks: Upland vegetation is dominant, differs from nearby seasonal wetland vegetation.

SOIL

Sampling Point: 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-2	10YR 3/1	100					sandy clay loam	
2-5	10YR 2/2	97	2.5YR 3/4	3	C	PL/M	clay	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

- 1 cm Muck (A9) (LRR C)
- 2 cm Muck (A10) (LRR B)
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes _____ No

Remarks: Soil was very hard, couldn't go below 5 inches. Not quite meeting hydric soil indicators.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1) (Nonriverine)
- Sediment Deposits (B2) (Nonriverine)
- Drift Deposits (B3) (Nonriverine)
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

- Water Marks (B1) (Riverine)
- Sediment Deposits (B2) (Riverine)
- Drift Deposits (B3) (Riverine)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No Depth (inches): _____
 Water Table Present? Yes _____ No Depth (inches): _____
 Saturation Present? (includes capillary fringe) Yes _____ No Depth (inches): _____

Wetland Hydrology Present? Yes _____ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: No wetland hydrology

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: PG&E Santa Cruz 115KV Reinbreemat City/County: Santa Cruz Co. Sampling Date: 6-10-13
 Applicant/Owner: PG&E State: CA Sampling Point: 4
 Investigator(s): K. Bischel & C. Battaglia Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): ditch Local relief (concave, convex, none): concave Slope (%): 0-1
 Subregion (LRR): C Lat: 36.96791 Long: -121.77260 Datum: NAD83
 Soil Map Unit Name: Watsonville loam, thick surface, 0-2% slopes NWI classification: PEM1
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: <u>wetland within agricultural ditch; obligate wetland veg present; standing water in some locations, Freshwater marsh, Wetland areas north west & southeast of road connected by culvert under road.</u>	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>4</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____	_____	_____	_____	
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>10' x 10'</u>)				
1. <u>Salix lasiolepis</u>	<u>10</u>	<u>Y</u>	<u>FACW</u>	Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species <u>32</u> x 1 = <u>32</u> FACW species <u>62</u> x 2 = <u>124</u> FAC species <u>5</u> x 3 = <u>15</u> FACU species <u>6</u> x 4 = <u>24</u> UPL species <u>2</u> x 5 = <u>10</u> Column Totals: <u>107</u> (A) <u>205</u> (B) Prevalence Index = B/A = <u>1.92</u>
2. <u>Salix lasiolepis</u>	<u>5</u>	<u>Y</u>	<u>FACW</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>15</u> = Total Cover				
Herb Stratum (Plot size: <u>10' x 10'</u>)				
1. <u>Juncus lastolii</u>	<u>25</u>	<u>Y</u>	<u>OBL</u>	Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 ¹ ___ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain)
2. <u>Panicum sp.</u>	<u>30</u>	<u>Y</u>	<u>FACW</u>	
3. <u>Cyperus eragrostis</u>	<u>12</u>	<u>N</u>	<u>FACW</u>	
4. <u>Epilobium gilvatum</u>	<u>5</u>	<u>N</u>	<u>FACW</u>	
5. <u>Rumex crispus</u>	<u>1</u>	<u>N</u>	<u>FAC</u>	
6. <u>Holcus lanatus</u>	<u>4</u>	<u>N</u>	<u>FAC</u>	
7. <u>Anagallis arvensis</u>	<u>2</u>	<u>N</u>	<u>NL/UPL</u>	
8. <u>Helminthotheca echioides</u>	<u>1</u>	<u>N</u>	<u>FACU</u>	
<u>Nasturtium officinale</u>	<u>6</u>	<u>N</u>	<u>OBL</u>	
<u>92</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)				
1. <u>Cynodon dactylon</u>	<u>5</u>	<u>N</u>	<u>FACU</u>	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Mentha pulegium</u>	<u>1</u>	<u>N</u>	<u>OBL</u>	
<u>92</u> = Total Cover				
% Bare Ground in Herb Stratum <u>15</u> % Cover of Biotic Crust <u>0</u>		Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

Remarks: Emergent wetland veg (Schoenoplectus sp., Typha sp., etc.) also present in ditch on the southern side of the road.

SOIL

Sampling Point: 4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10YR 3/2	98	10YR 4/6	2	C	M	SL	
4-14	10YR 2/1	45	5YR 4/6	5	C	PL	L	(Gley 1, 2.5/10G) - 50%

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		

Indicators for Problematic Hydric Soils³:

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes No

Remarks: *dark decomposed organic material in soil.*

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes No _____ Depth (inches): 1" *Next to soil pit*

Water Table Present? Yes No _____ Depth (inches): 8"

Saturation Present? Yes No _____ Depth (inches): 2"

Wetland Hydrology Present? Yes No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: PG&E Santa Cruz 115KV Reimbrenat City/County: Santa Cruz Co. Sampling Date: 6-10-13
 Applicant/Owner: PG&E State: CA Sampling Point: 5
 Investigator(s): K. Bischel & C. Battaglia Section, Township, Range: N/A
 Landform (hillslope, terrace, etc.): disturbed road shoulder Local relief (concave, convex, none): none Slope (%): 0
 Subregion (LRR): C Lat: 36.96792 Long: -121.77257 Datum: NAD83
 Soil Map Unit Name: Watsonville loamy, thick surface, 0-2% slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: <u>Upland next to SP4. No wetland veg or hydrology. No soil pit needed. Disturbed road shoulder next to ditch.</u>	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>2</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)
4. _____	_____	_____	_____	
_____ = Total Cover				
Shrub/Strat. (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:
1. _____	_____	_____	_____	Total % Cover of: _____ Multiply by: _____
2. _____	_____	_____	_____	OBL species <u>0</u> x 1 = <u>0</u>
3. _____	_____	_____	_____	FACW species <u>0</u> x 2 = <u>0</u>
4. _____	_____	_____	_____	FAC species <u>15</u> x 3 = <u>45</u>
5. _____	_____	_____	_____	FACU species <u>5</u> x 4 = <u>20</u>
_____ = Total Cover				UPL species <u>12</u> x 5 = <u>60</u>
				Column Totals: <u>32</u> (A) <u>125</u> (B)
				Prevalence Index = B/A = <u>3.91</u>
Herb Stratum (Plot size: <u>5'x5'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators:
1. <u>Plantago lanceolata</u>	<u>10</u>	<u>Y</u>	<u>FAC</u>	<input type="checkbox"/> Dominance Test is >50%
2. <u>Amaranthus barbatifolius</u>	<u>10</u>	<u>Y</u>	<u>NL/UPL</u>	<input type="checkbox"/> Prevalence Index is ≤3.0 ¹
3. <u>Hordeum marinum</u>	<u>3</u>	<u>N</u>	<u>FAC</u>	<input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
4. <u>Riparianus sativus</u>	<u>2</u>	<u>N</u>	<u>NL/UPL</u>	<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
5. <u>Helminthotheca echioides</u>	<u>5</u>	<u>N</u>	<u>FACU</u>	
6. <u>Festuca perennis</u>	<u>2</u>	<u>N</u>	<u>FAC</u>	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>32</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Footnote:
1. _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>70</u> % Cover of Biotic Crust _____				
Remarks: <u>Ruderal, sparse vegetation.</u>				
Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>				

APPENDIX B: HABITAT MAP

(see PDF version for appendix)



0 37.5 75 150 Feet
 1 inch = 150 feet
 1:1,800

AECOM



Study Area

Culvert Location

Habitat Type

Agriculture

Annual Grassland

Developed/Ruderal

Freshwater Marsh

Source: AECOM 2013
 Base Image: ESRI 2010

Santa Cruz 115 kV Reinforcement Project

Appendix B: Habitat Map (1 of 2)

July 15, 2013



0 37.5 75 150 Feet
 1 inch = 150 feet
 1:1,800

AECOM



Study Area

Location E-10

Habitat Type

Annual Grassland
 Developed/Ruderal

Seasonal Wetland

Stock Pond

Source: AECOM 2013
 Base Image: ESRI 2010

Santa Cruz 115 kV Reinforcement Project
 Appendix B: Habitat Map (2 of 2)
 July 15, 2013

APPENDIX C: SITE PHOTOGRAPHS



Photograph 1: A view of Stock Pond 1, looking south. Sampling Point 1 was taken in the foreground of the photograph, and the riparian corridor along an RPW is shown at the right edge of the photograph.



Photograph 2: Seasonal Wetland 1, looking uphill towards old well equipment and Stock Pond 2 (to the top left of the photograph). The shovel indicates the site of Sampling Point 2.



Photograph 3: Soils at Sampling Point 2 in Seasonal Wetland 1. The photograph shows redoximorphic features in the soil.



Photograph 4: Upland habitat adjacent to Stock Pond 1 and Seasonal Wetland 1. The location of Sampling Point 3 is located at the approximate center of the photograph.



Photograph 5: A view of Relatively Permanent Water 1 in the agricultural drainage ditch. Sampling Point 4 is located in the approximate center of the photograph.



Photograph 6: A view of the two plastic culverts that will be replaced as a part of the project. Freshwater marsh vegetation in Relatively Permanent Water 1 is shown in the foreground.



Photograph 7: Hydric soils at Sample Point 4 in Relatively Permanent Water 1.

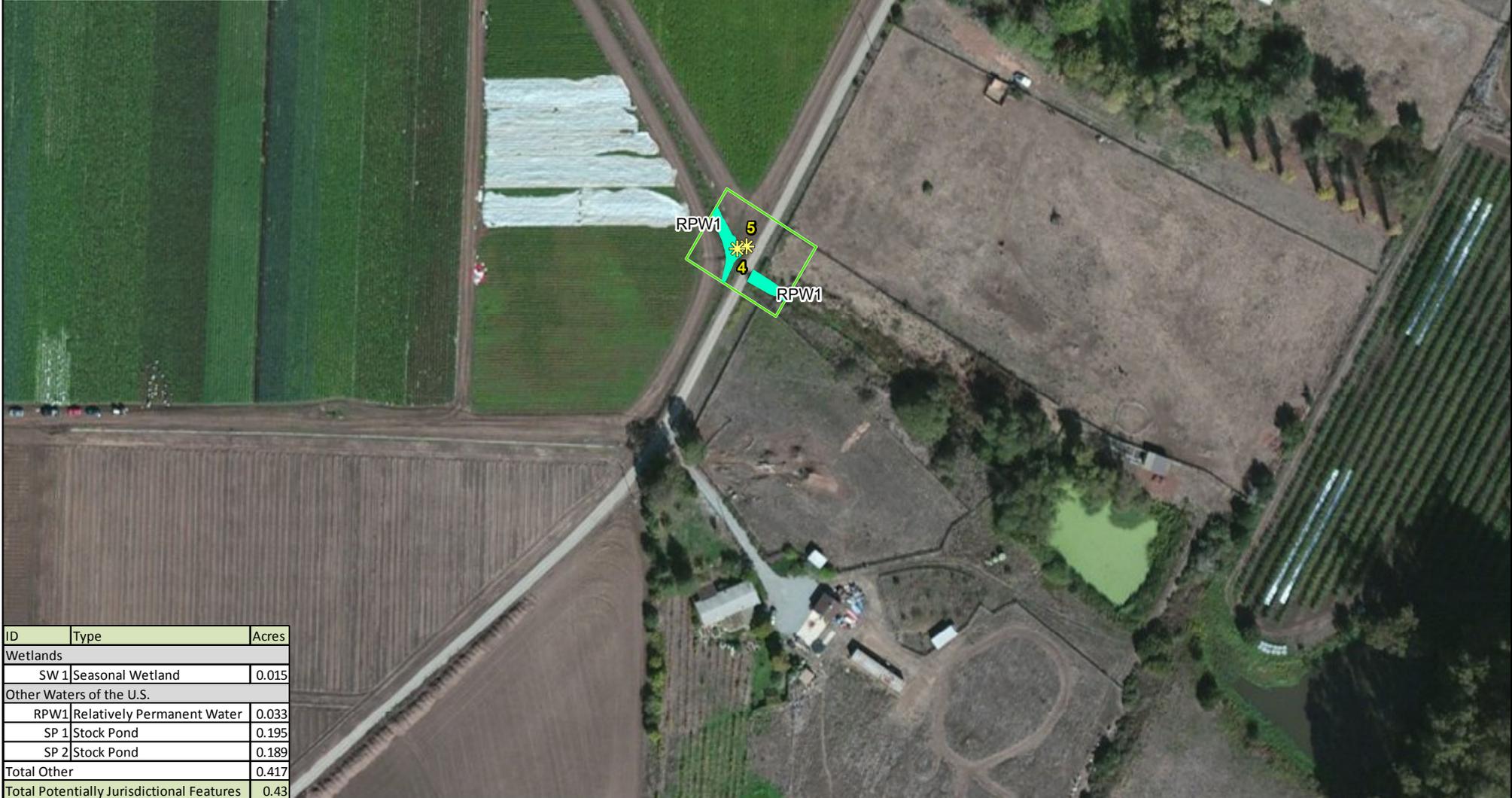


Photograph 8: A view of Sample Point 5, adjacent to Relatively Permanent Water 1 and characterized by ruderal upland vegetation.

APPENDIX D: WETLAND DELINEATION MAPS

(see PDF version for appendix)

Directions from San Francisco
 Take US 101 South
 Exit onto CA-85 South
 Exit onto CA-17 South
 Take CA-1 South
 Take Freedom Blvd exit
 Keep left, follow signs for Freedom Blvd
 Turn left onto Freedom Blvd
 Turn left onto Corralitos Rd
 Turn right onto Varni Rd
 Turn right onto Kliewer Lane



ID	Type	Acres
Wetlands		
SW 1	Seasonal Wetland	0.015
Other Waters of the U.S.		
RPW1	Relatively Permanent Water	0.033
SP 1	Stock Pond	0.195
SP 2	Stock Pond	0.189
Total Other		0.417
Total Potentially Jurisdictional Features		0.43



 Feet
 0 37.5 75 150
1 inch = 150 feet
1:1,800




Study Area
 Culvert Location

Potentially Jurisdictional Features
 Sample Point
 Relatively Permanent Water

Delineated by K. Bischel
 and C. Battaglia on 6/10/13

Source: AECOM 2013
 Base Image: ESRI 2010

Santa Cruz 115 kV Reinforcement Project
Appendix D: Wetland Delineation Map
 (1 of 2) July 15, 2013

Directions from San Francisco
Take US 101 South
Exit onto CA-85 South
Exit onto CA-17 South
Take CA-1 South
Take Freedom Blvd exit
Keep left, follow signs for Freedom Blvd
Turn left onto Freedom Blvd
Turn left onto Corralitos Rd
Turn right onto Varni Rd
End 190 Pioneer Rd



ID	Type	Acres
Wetlands		
SW 1	Seasonal Wetland	0.015
Other Waters of the U.S.		
RPW1	Relatively Permanent Water	0.033
SP 1	Stock Pond	0.195
SP 2	Stock Pond	0.189
Total Other		0.417
Total Potentially Jurisdictional Features		0.43



 Feet
 0 37.5 75 150
1 inch = 150 feet
1:1,800




Study Area
 Location E-10

Potentially Jurisdictional Features
 Seasonal Wetland
 Stock Pond

 Sample Point

Delineated by K. Bischel
 and C. Battaglia on 6/10/13

Source: AECOM 2013
Base Image: ESRI 2010

Santa Cruz 115 kV Reinforcement Project
Appendix D: Wetland Delineation Map
 (2 of 2) July 15, 2013

APPENDIX E: SPECIES OBSERVED

Species Observed on June 10, 2013

Scientific Name	Common Name	NWPL 2012 Status
<i>Anagallis arvensis</i>	Scarlet pimpernel	NL/UPL
<i>Avena barbata</i>	Slender oat	NL
<i>Cynodon dactylon</i>	Bermudagrass	FACU
<i>Cyperus eragrostis</i>	Tall flat sedge	FACW
<i>Epilobium ciliatum</i>	Fringed willowherb	FACW
<i>Festuca perennis</i>	Italian ryegrass	FAC
<i>Helminthotheca echioides</i>	Bristly ox-tongue	FACU
<i>Holcus lanatus</i>	Velvet grass	FAC
<i>Hordeum marinum ssp. gussoneanum</i>	Mediterranean barley	FAC
<i>Hordeum murinum ssp. Leporinum</i>	Wild barley	FACU
<i>Hydrocotyle ranunculoides</i>	Floating marsh pennywort	OBL
<i>Lotus corniculatus</i>	Bird's-foot trefoil	FAC
<i>Mentha pulegium</i>	Pennyroyal	OBL
<i>Nasturtium officinale</i>	Watercress	OBL
<i>Persicaria sp. (c.f. maculosa)</i>	Lady's thumb	FACW
<i>Plantago lanceolata</i>	English plantain	FAC
<i>Polypogon monspeliensis</i>	Rabbitsfoot grass	FACW
<i>Raphanus sativus</i>	Wild radish	NL/UPL
<i>Rumex crispus</i>	Curly dock	FAC
<i>Salix lasiolepis</i>	Arroyo willow	FACW
<i>Salix laevigata</i>	Red willow	FACW
<i>Schoenoplectus sp.</i>	Tule	OBL
<i>Trifolium repens</i>	White clover	FACU
<i>Typha latifolia</i>	Broad-leaved cattail	OBL
<p>Notes: Nomenclature follows The Jepson Manual 2 (Baldwin 2012). FAC = Facultative FACU = Facultative Upland FACW = Facultative Wetland NL= Not Listed; these are assumed to be UPL OBL = Obligate UPL = Upland Source: Baldwin et al. 2012, Lichvar et al. 2012</p>		

ATTACHMENT B: GIS DATA TRANSFER SUMMARY

Santa Cruz 115 Kilovolt Reinforcement Project – Geographic Information System (GIS) Data Transfer Summary

The shapefiles provided in the zip file are described in the table that follows. All of the data is provided in the NAD_1983_UTM_Zone_10N coordinate system, in Meter units.

Shapefile Name	Description	Geometry Type	Source
SCR_DR8_Culvert	Approximate Culvert Locations	Polyline	PG&E, 2014; Insignia, 2014
SCR_DR8_Northern_Alignment	Proposed Project Northern Alignment	Polyline	PG&E, 2014; Insignia, 2014
SCR_DR8_Riser	Proposed Riser Pole Locations	Point	PG&E, 2014; Insignia, 2014
SCR_DR8_Temp_Work_Areas_and_Vaults	Temporary Work Areas and Vault Locations	Polygon	PG&E, 2014; Insignia, 2014
SCR_DR8_Underground_Features	Underground Alignment, Edge of Pavement, Retaining Wall Location	Polyline	PG&E, 2014; Insignia, 2014
Habitat	Vegetation types, land cover	Polygon	AECOM, 2013
StudyArea	Location E-30, Culvert Location	Polygon	AECOM, 2013
WetDelSoils	Soil types (Natural Resource Conservation Service, Soil Survey Geographic Database)	Polygon	AECOM, 2013
WetlandDelineation	Wetland features	Polygon	AECOM, 2013

**ATTACHMENT C: SANTA CRUZ COUNTY PUBLIC WORKS DEPARTMENT MEETING
NOTES**



Agency: Santa Cruz County Public Works Department

Meeting Date: April 22, 2014

Meeting Location: 801 Ocean Street Suite 410, Santa Cruz CA

Attendees:

- John Presleigh, Director of Santa Cruz County Public Works
- Jack Sohriakoff, Senior Civil Engineer, Traffic, Surveyor and Development Review, Department of Public Works
- Santa Cruz County Public Works Staff
- Dawn Mathes, Pacific Gas and Electric Company (PG&E) Government Relations Representative
- Brandon Liddell, PG&E Land Planner
- Buck Jones, Transcon Environmental Planner

Meeting Notes:

- PG&E described the objective of the project to increase reliability in Santa Cruz County, and the current status of the California Environmental Quality Act review.
- The County stated that they have heard from several constituents about the project.
- PG&E described the overall project scope including the proposed overhead alignment from Green Valley Substation to Rob Roy Substation.
- PG&E explained the typical material and dimensions of the cable conduit, underground trench, vaults, and underground to overhead riser pole structures.
- PG&E described the proposed alternative underground alignment location along the Cox-Freedom Segment and noted that the vaults would be sited off pavement, while the underground alignment would be placed between the existing water mains for the majority of the line.
- PG&E stated that due to the narrow width of the roads, construction would require full road closures from East Cox Road to the end of McDonald Road.
- The County expressed concern about maintaining fire access, and PG&E stated that construction would maintain access with steel plates located onsite for expeditious installation.
- The County said that full road closures would like be restricted from 8:30 AM to 4:30 PM.
- The County would want to further review the need for a full road closure for the entire day. The County normally would not allow this to occur, so an alternative plan needs to be evaluated, such as maintaining temporary closures and openings at specified times throughout the day. This will allow some local traffic to utilize the roadway at specific times, something that their crews are very familiar with.

ATTACHMENT D: FAA DETERMINATION OF NO HAZARD TO AIR NAVIGATION

Attachment D: FAA Determination of No Hazard to Air Navigation

Structure	Site Elevation (feet)	Height (Above Ground Level) (feet)	Height (Above Mean Sea Level) (feet)	Aeronautical Study Number	FAA Determination
C-01 (Green Valley- Rob Roy)	126	70	196	2013-AWP-6952-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation
C-01 (Green Valley- Camp Evers)	126	70	196	2013-AWP-6953-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation
C-02 (Green Valley- Rob Roy)	128	85	213	2013-AWP-6954-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation
C-02 (Green Valley- Camp Evers)	128	85	213	2013-AWP-6955-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation
C-03 (Green Valley- Rob Roy)	122	90	212	2013-AWP-6956-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation
C-03 (Green Valley- Camp Evers)	121	90	211	2013-AWP-6957-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation
C-04	99	80	179	2013-AWP-6958-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation
C-05	78	95	173	2013-AWP-6959-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation
C-06	99	85	184	2013-AWP-6960-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation

Structure	Site Elevation (feet)	Height (Above Ground Level) (feet)	Height (Above Mean Sea Level) (feet)	Aeronautical Study Number	FAA Determination
C-07	118	85	203	2013-AWP-6961-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation
C-08	150	85	235	2013-AWP-6962-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation
C-09	153	85	238	2013-AWP-6963-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation
C-10	158	85	243	2013-AWP-6964-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation
C-11	171	80	251	2013-AWP-6965-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation
C-12 (Green Valley-Camp Evers)	177	85	262	2013-AWP-6966-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation
C-12 (Green Valley-Rob Roy)	177	85	262	2013-AWP-6967-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation
C-13	175	95	270	2013-AWP-6968-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation
C-14	174	95	269	2013-AWP-6969-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation
C-15	176	95	271	2013-AWP-6892-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation
C-16	176	105	281	2013-AWP-6893-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation
C-17	178	95	273	2013-AWP-6894-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation

Structure	Site Elevation (feet)	Height (Above Ground Level) (feet)	Height (Above Mean Sea Level) (feet)	Aeronautical Study Number	FAA Determination
C-18	181	100	281	2013-AWP-6895-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation
C-19	188	95	283	2013-AWP-6896-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation
C-20	186	90	276	2013-AWP-6897-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation
C-21	182	90	272	2013-AWP-6898-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation
C-22	194	90	284	2013-AWP-6997-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation
C-23	194	85	279	2013-AWP-6951-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation
C-24	199	80	279	2013-AWP-6950-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation
C-25	207	80	287	2013-AWP-6970-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation
C-26	151	82	233	2013-AWP-6971-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation
C-27	143	90	233	2013-AWP-6972-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation
C-28	148	90	238	2013-AWP-6973-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation
C-29	157	90	247	2013-AWP-6974-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation

Structure	Site Elevation (feet)	Height (Above Ground Level) (feet)	Height (Above Mean Sea Level) (feet)	Aeronautical Study Number	FAA Determination
C-30	178	90	268	2013-AWP-6975-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation
C-31	233	95	328	2013-AWP-6976-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation
C-32	257	100	357	2013-AWP-6977-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation
C-33	297	105	401	2013-AWP-6978-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation
C-34	345	95	440	2013-AWP-6979-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation
C-35	365	95	460	2013-AWP-6980-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation
C-36	395	70	465	2013-AWP-6981-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation
C-37	383	80	463	2013-AWP-6982-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation
C-38	385	90	475	2013-AWP-6983-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation
C-39	218	100	318	2013-AWP-6984-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation
C-40	232	95	327	2013-AWP-6985-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation
C-41	239	105	344	2013-AWP-6986-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation

Structure	Site Elevation (feet)	Height (Above Ground Level) (feet)	Height (Above Mean Sea Level) (feet)	Aeronautical Study Number	FAA Determination
C-42	240	105	345	2013-AWP-6987-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation
C-43	262	95	357	2013-AWP-6988-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation
C-44	291	90	381	2013-AWP-6989-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation
C-45	317	90	407	2013-AWP-6990-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation
C-46	343	95	438	2013-AWP-6991-OE	Structure does not exceed obstruction standards and would not be a hazard to air navigation
C-47	407	95	502	2013-AWP-3839-OE Pole 4-47	Structure does not exceed obstruction standards and would not be a hazard to air navigation
C-48	477	85	562	2013-AWP-6994-OE Pole 4-48 #2	Structure does not exceed obstruction standards and would not be a hazard to air navigation
C-49	510	80	590	2013-AWP-3840-OE Pole 4-50	Structure does not exceed obstruction standards and would not be a hazard to air navigation



Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6892-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr 1/15
 Location: WATSONVILLE, CA
 Latitude: 36-57-50.09N NAD 83
 Longitude: 121-45-49.66W
 Heights: 176 feet site elevation (SE)
 95 feet above ground level (AGL)
 271 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6892-OE.

Signature Control No: 201005263-205349633

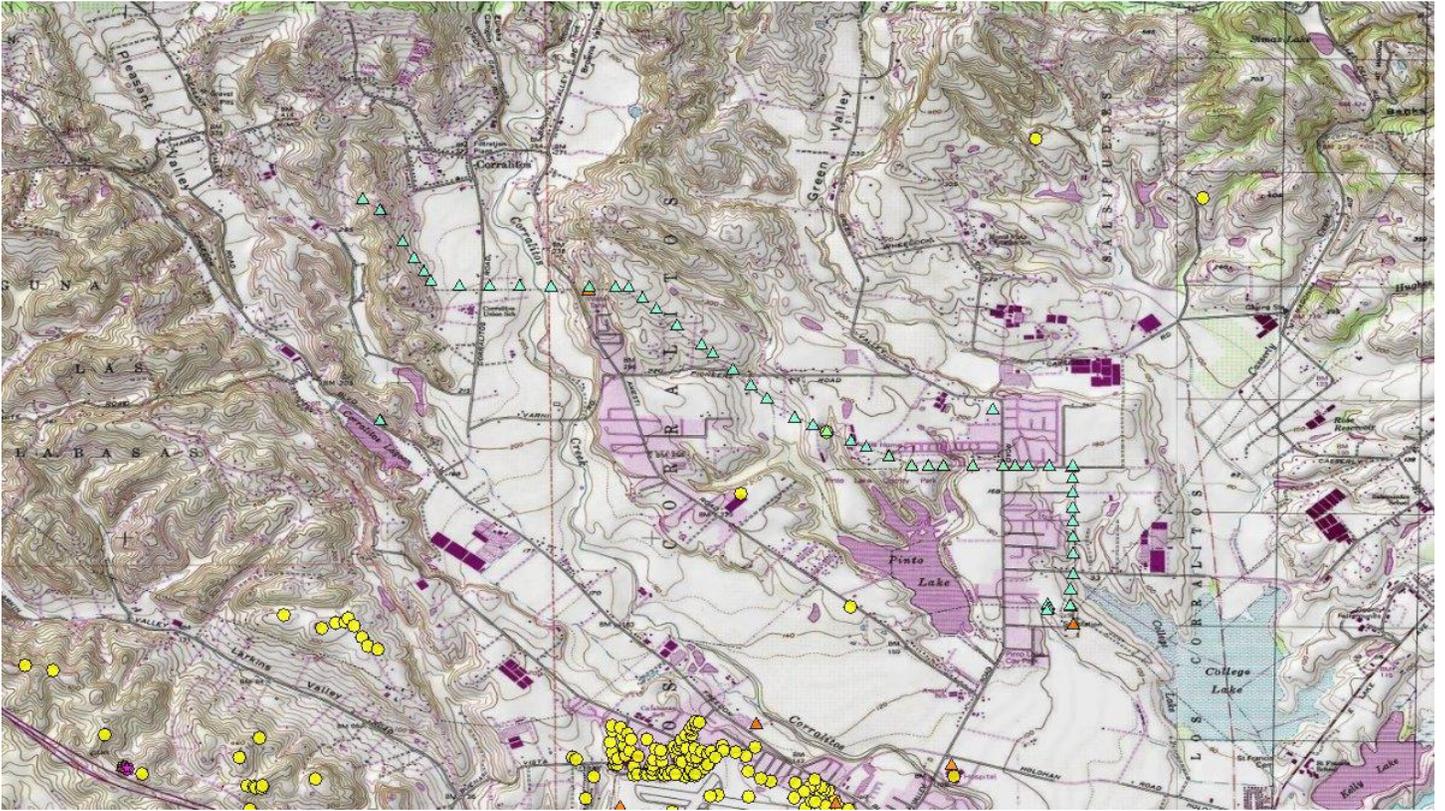
(DNE)

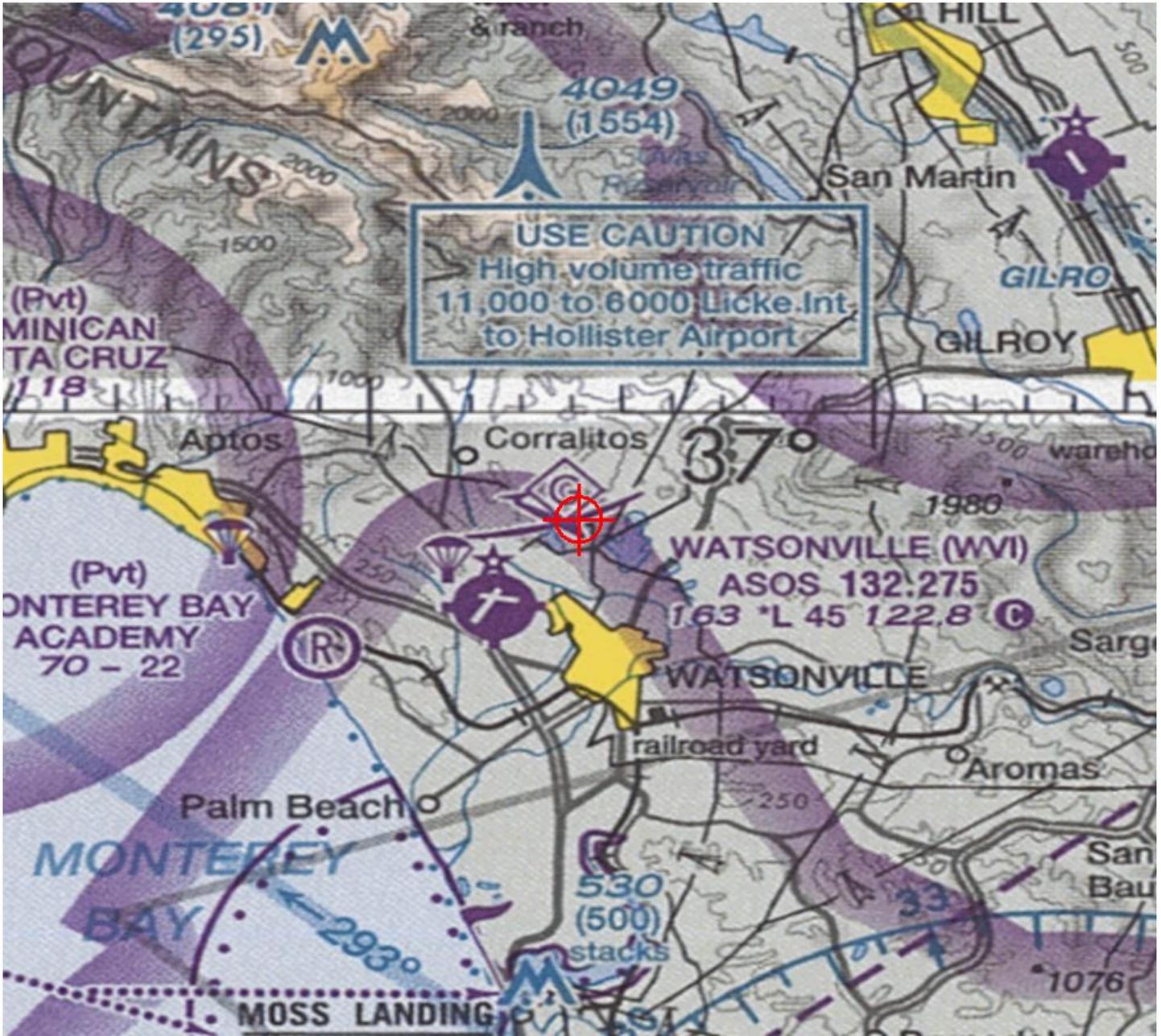
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

ADDED 43 MORE SITES

Verified Map for ASN 2013-AWP-6892-OE







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6893-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr 1/16
 Location: WATSONVILLE, CA
 Latitude: 36-57-50.08N NAD 83
 Longitude: 121-45-53.06W
 Heights: 176 feet site elevation (SE)
 105 feet above ground level (AGL)
 281 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6893-OE.

Signature Control No: 201005324-205349623

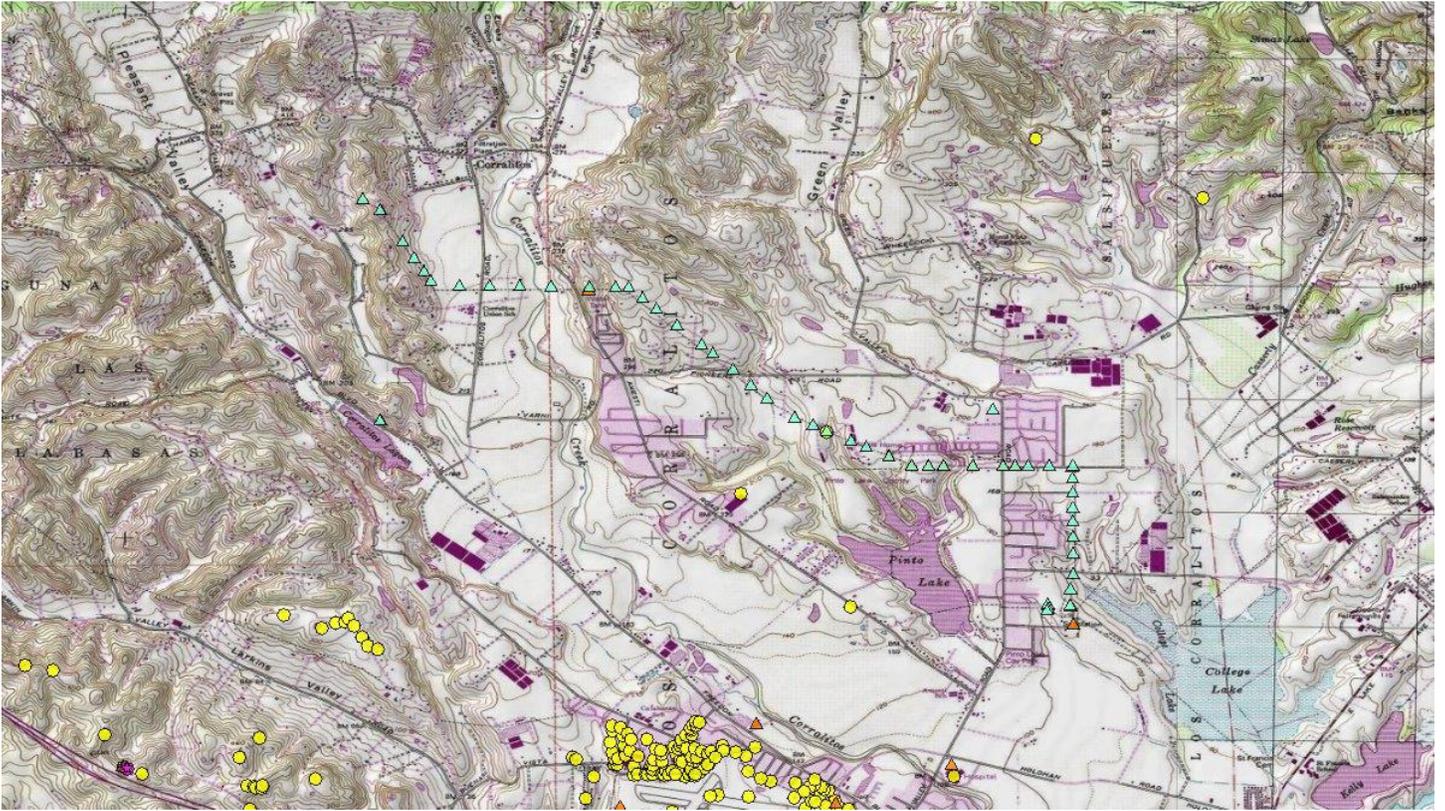
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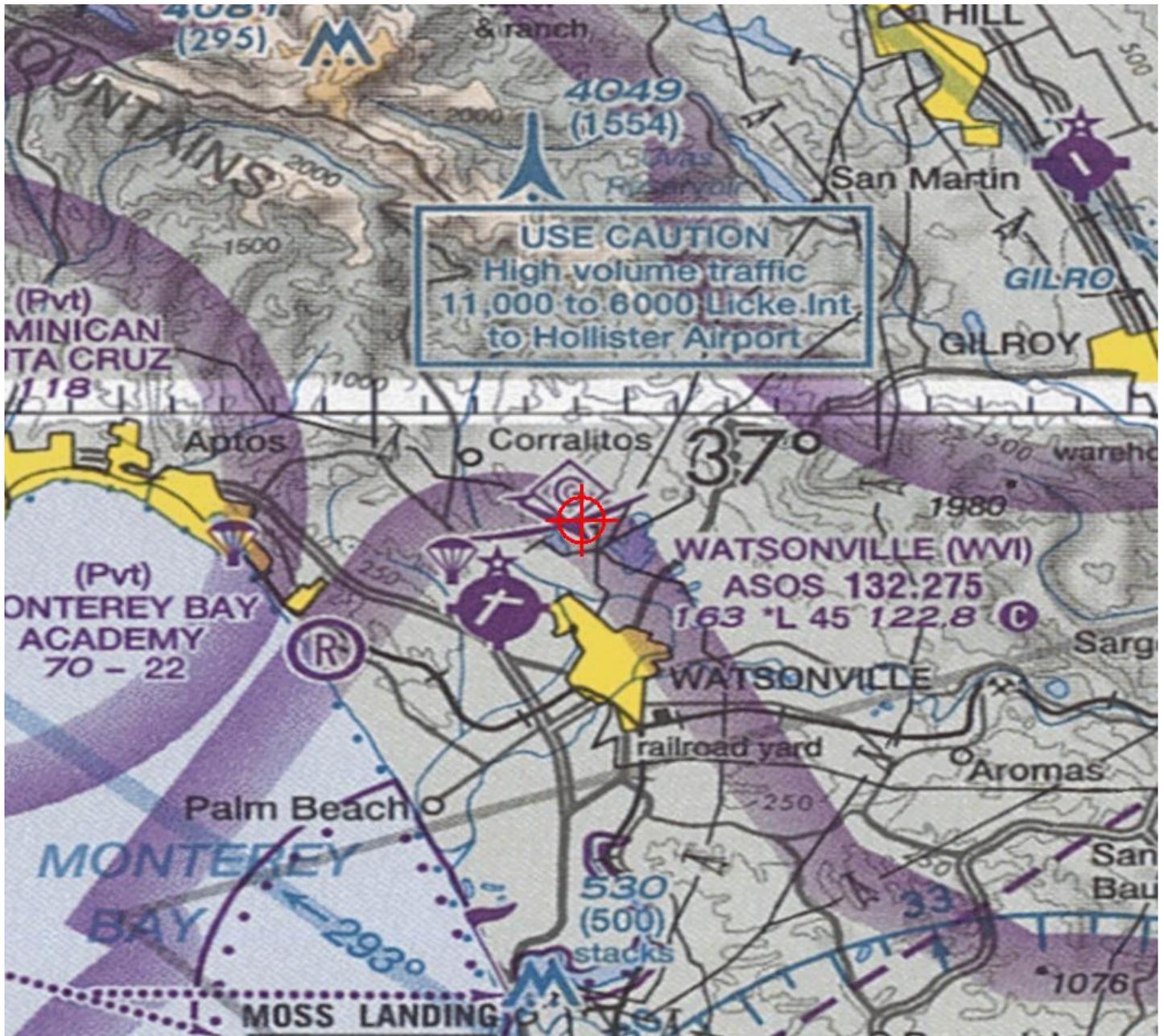
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6893-OE

PROPOSEING TO INSTALL #20 OF 55 POLES FOR 115 kV REINFORCEMENT PROJECT







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6894-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr 1/17
 Location: WATSONVILLE, CA
 Latitude: 36-57-50.12N NAD 83
 Longitude: 121-46-01.73W
 Heights: 178 feet site elevation (SE)
 95 feet above ground level (AGL)
 273 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6894-OE.

Signature Control No: 201005387-205349625

(DNE)

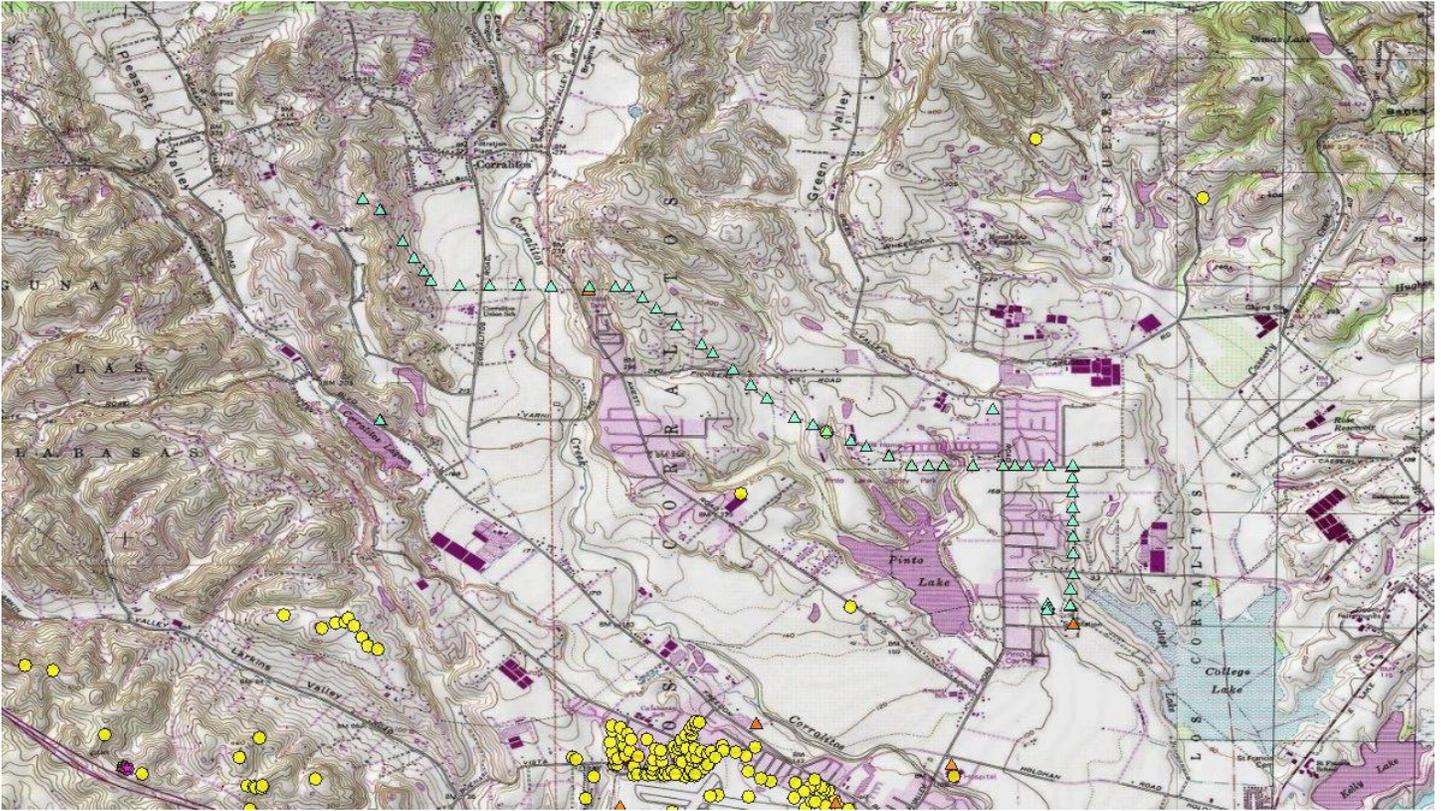
Karen McDonald
Specialist

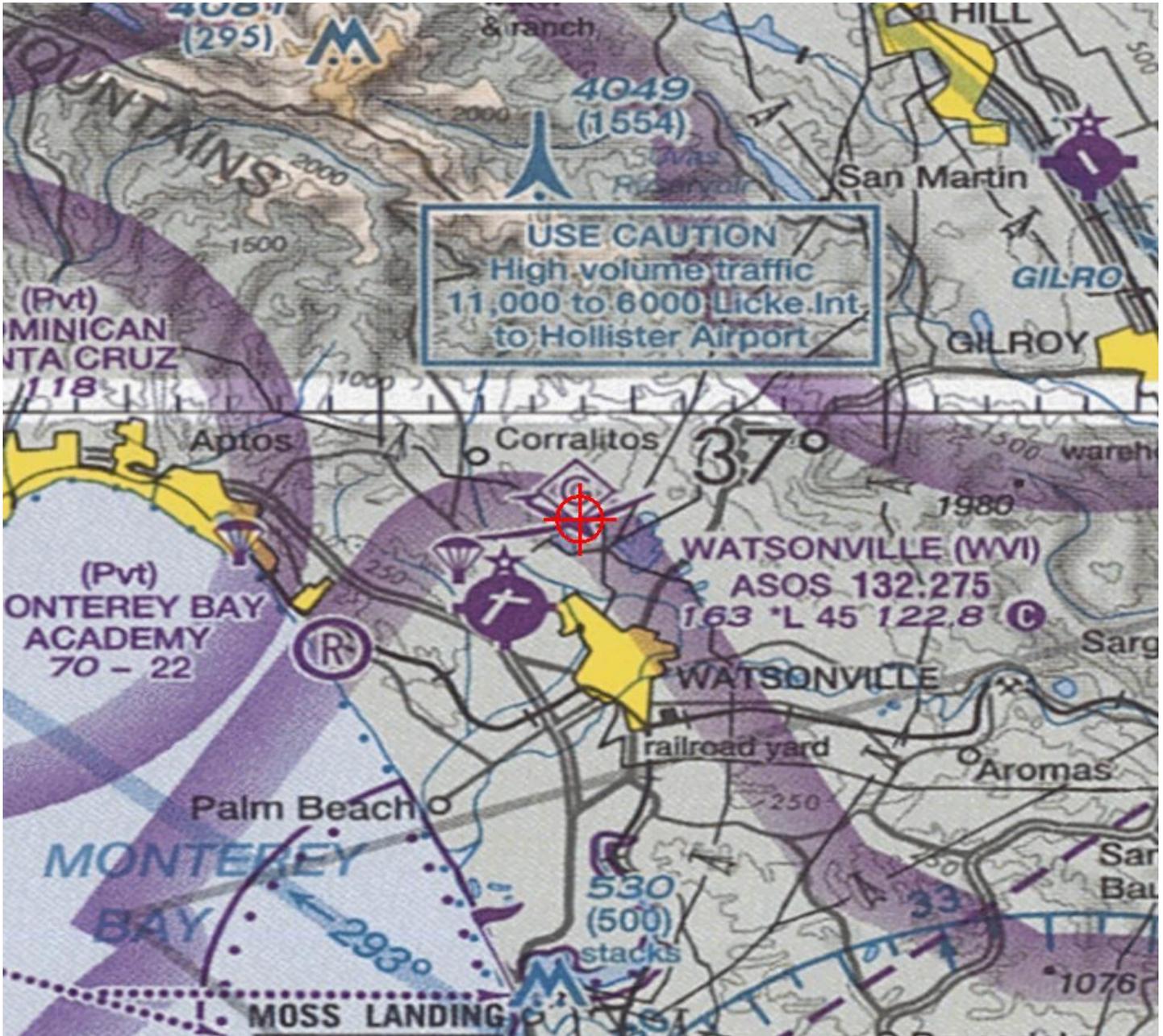
Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6894-OE

PROPOSEING TO INSTALL 21 OF 55 POLES FOR 115 kV REINFORCEMENT PROJECT

Verified Map for ASN 2013-AWP-6894-OE







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6895-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr 1/18
 Location: Watsonville, CA
 Latitude: 36-57-50.08N NAD 83
 Longitude: 121-46-10.12W
 Heights: 181 feet site elevation (SE)
 100 feet above ground level (AGL)
 281 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6895-OE.

Signature Control No: 201005444-205349636

(DNE)

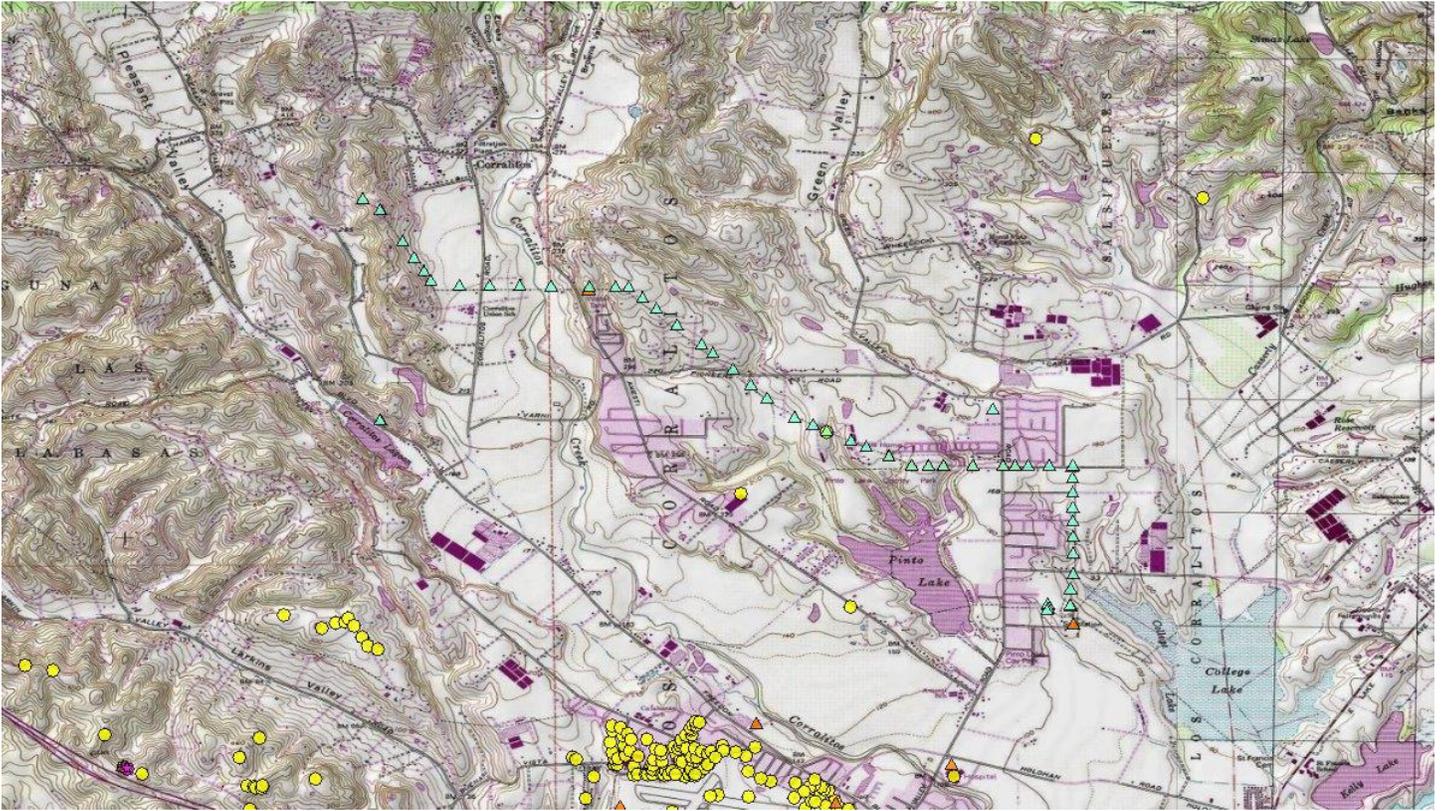
Karen McDonald
Specialist

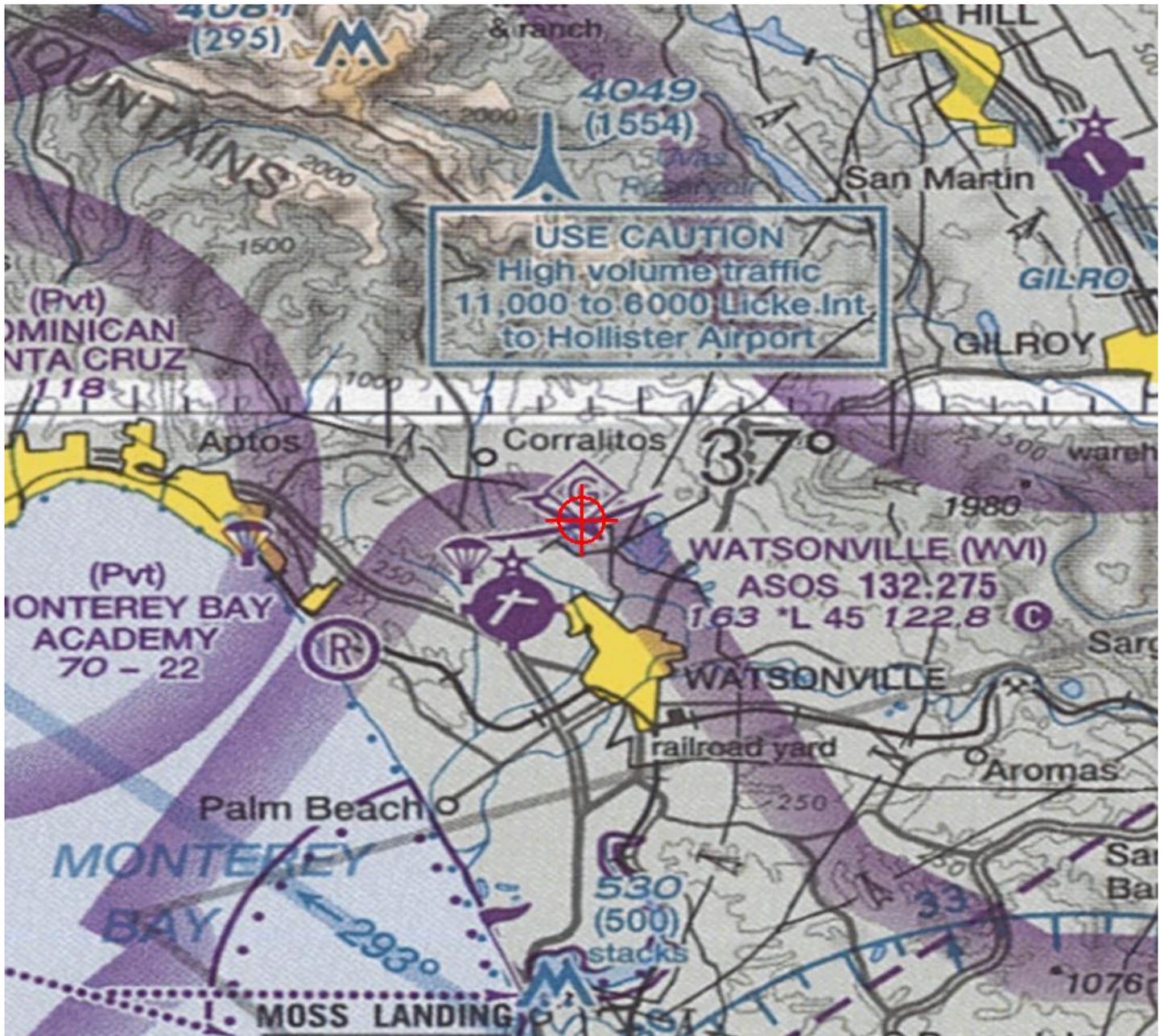
Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6895-OE

PROPOSEING TO INSTALL 22 OF 55 POLES FOR 115 kV REINFORCEMENT PROJECT

Verified Map for ASN 2013-AWP-6895-OE







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6896-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Trw 1/19
 Location: Watsonville, CA
 Latitude: 36-57-50.05N NAD 83
 Longitude: 121-46-14.39W
 Heights: 188 feet site elevation (SE)
 95 feet above ground level (AGL)
 283 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6896-OE.

Signature Control No: 201005593-205349627

(DNE)

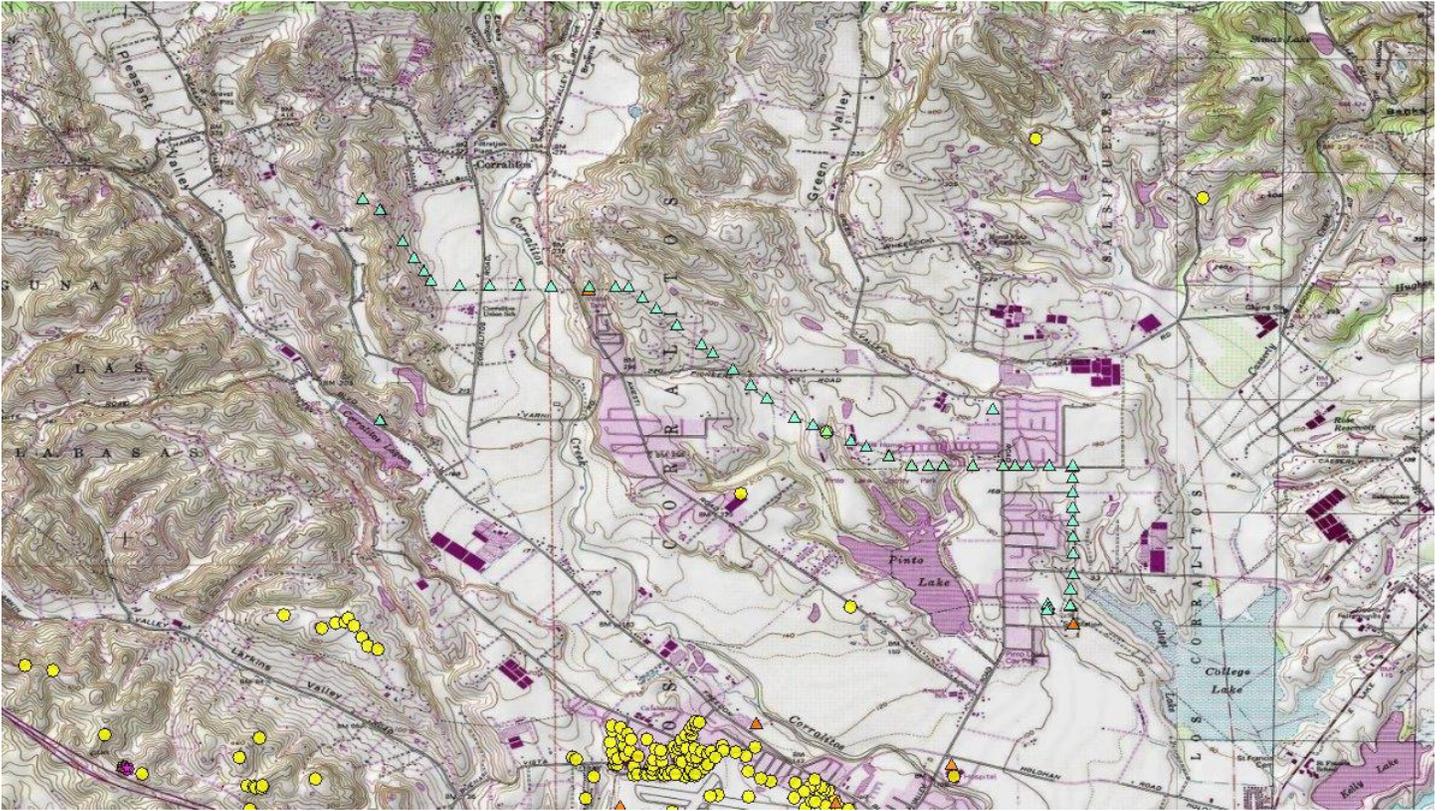
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6896-OE

PROPOSEING TO INSTALL 23 OF 55 POLES FOR 115 kV REINFORCEMENT PROJECT

Verified Map for ASN 2013-AWP-6896-OE





Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6897-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr 1/20
 Location: Watsonville, CA
 Latitude: 36-57-50.18N NAD 83
 Longitude: 121-46-19.18W
 Heights: 186 feet site elevation (SE)
 90 feet above ground level (AGL)
 276 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6897-OE.

Signature Control No: 201005934-205349628

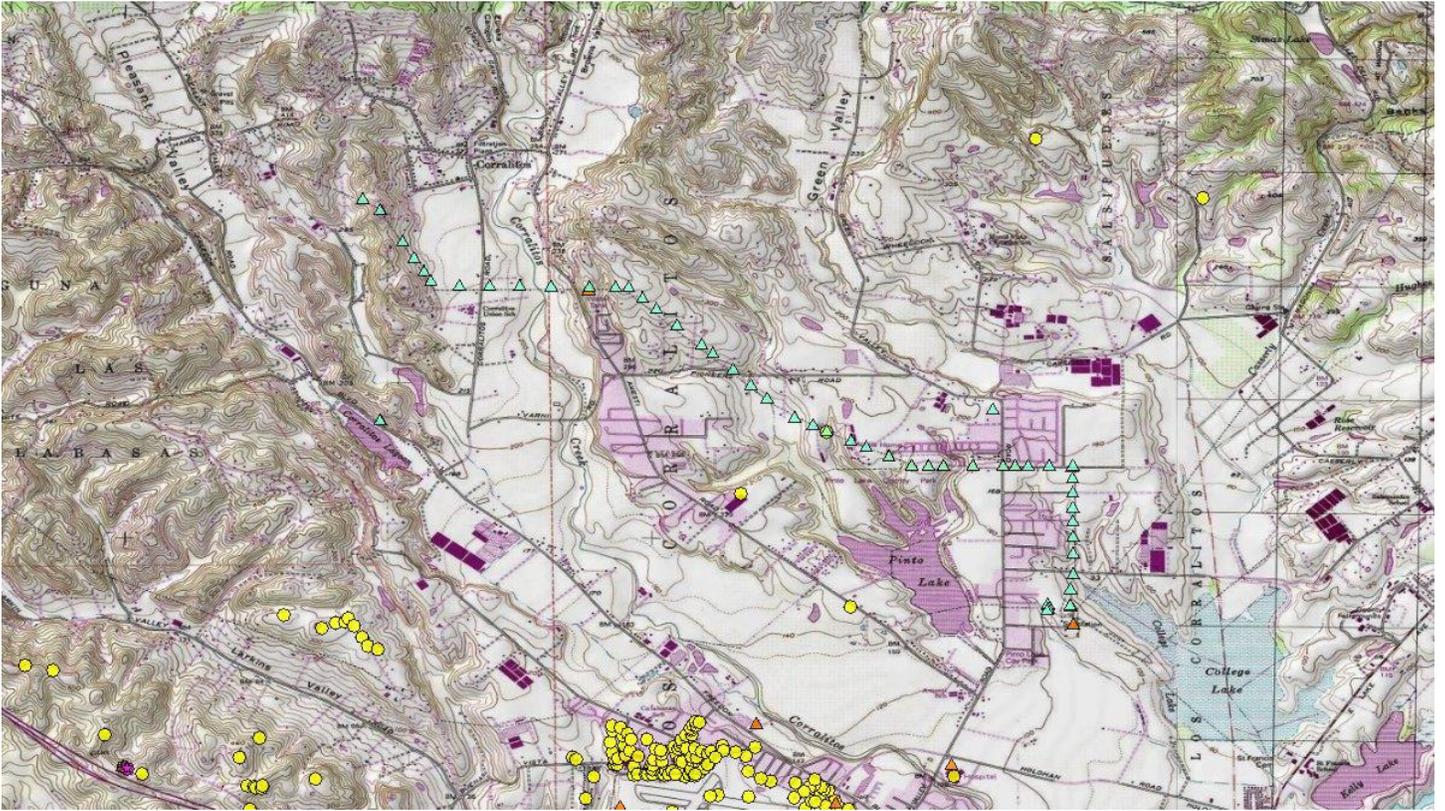
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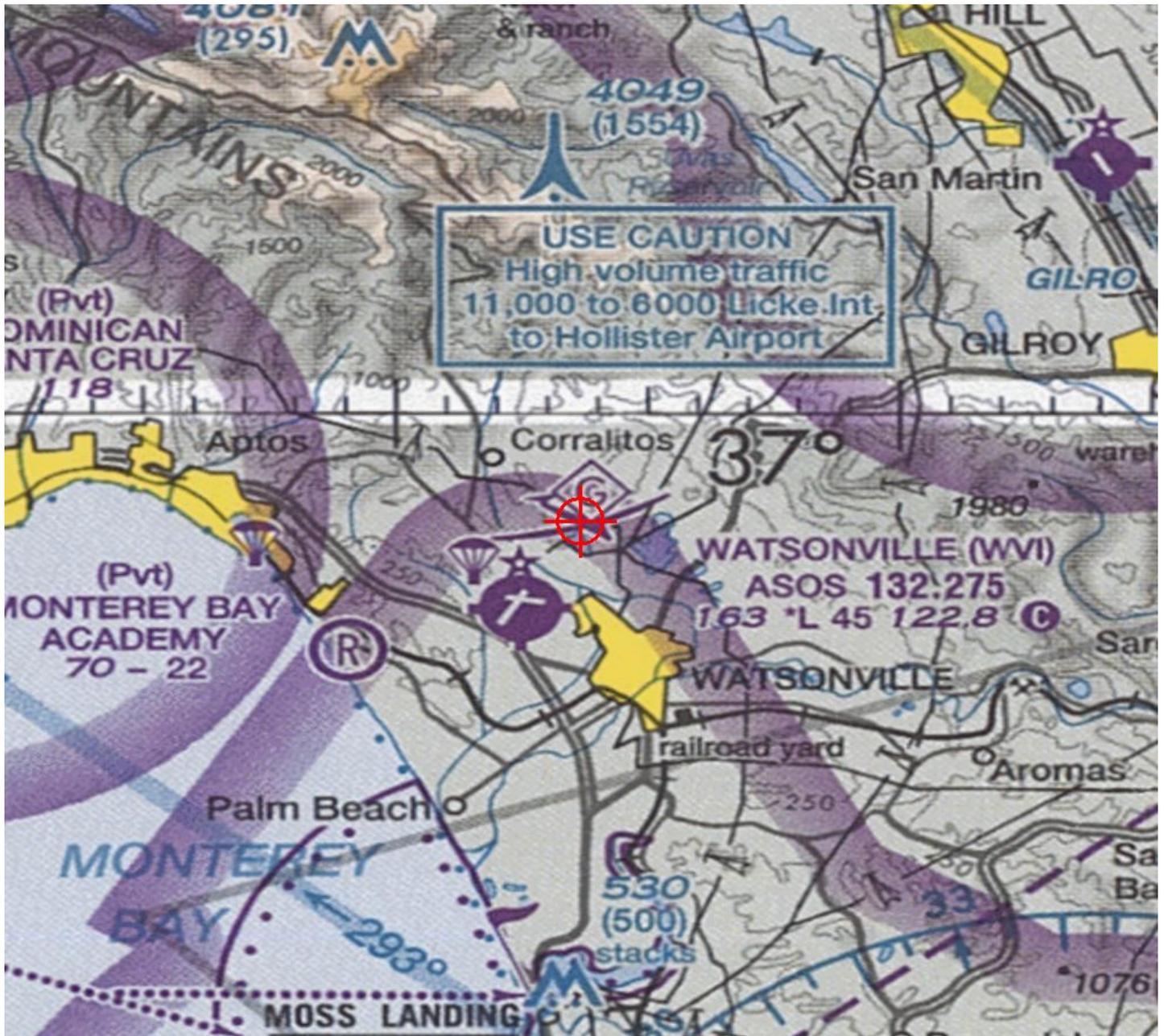
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6897-OE

PROPOSEING TO INSTALL 24 OF 55 POLES FOR 115 kV REINFORCEMENT PROJECT







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6898-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr 1/21
 Location: Watsonville, CA
 Latitude: 36-57-52.73N NAD 83
 Longitude: 121-46-25.71W
 Heights: 182 feet site elevation (SE)
 90 feet above ground level (AGL)
 272 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6898-OE.

Signature Control No: 201006079-205349635

(DNE)

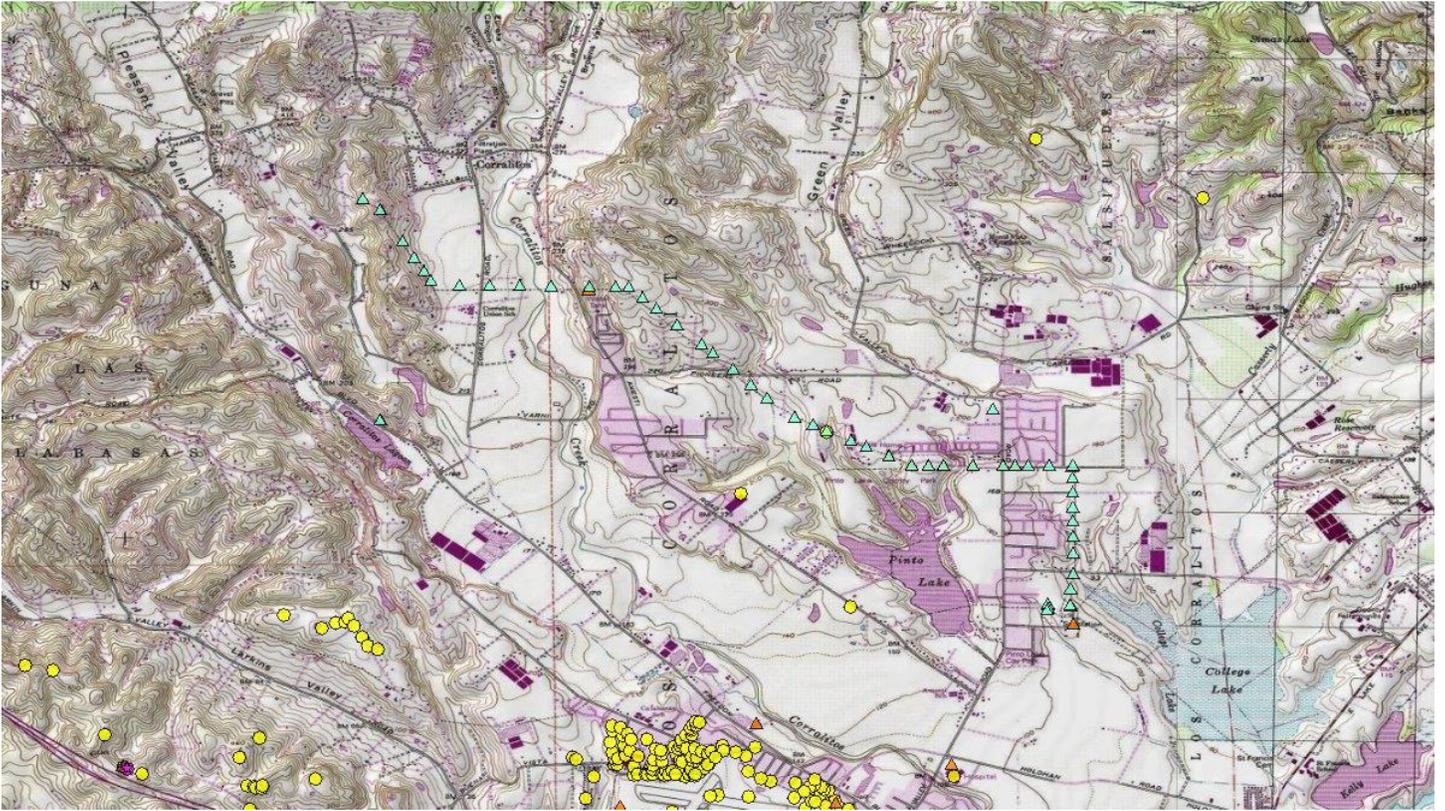
Karen McDonald
Specialist

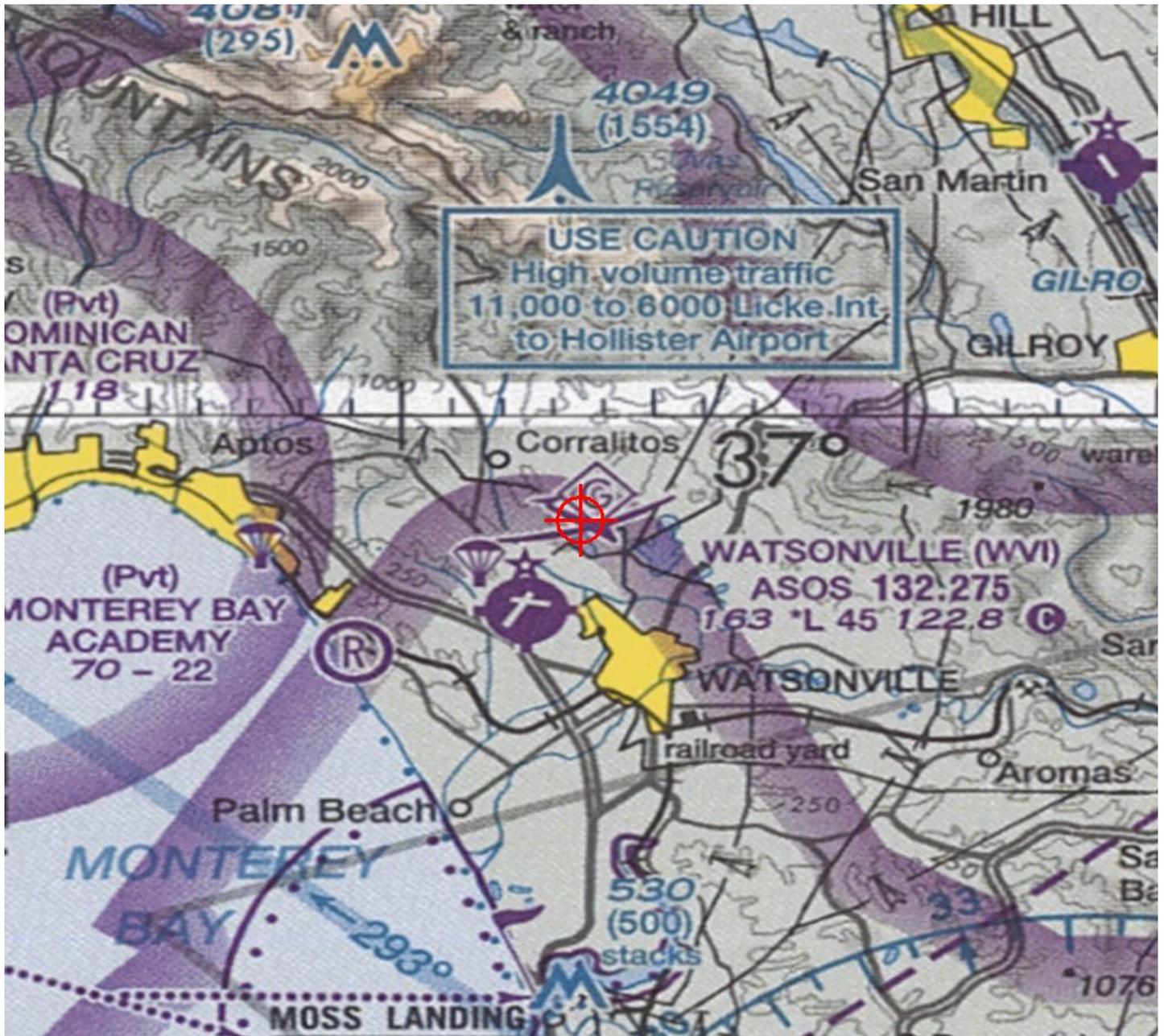
Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6898-OE

PROPOSEING TO INSTALL 25 OF 55 POLES FOR 115 kV REINFORCEMENT PROJECT

Verified Map for ASN 2013-AWP-6898-OE







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6950-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole tX Twr 2/24
 Location: WATSONVILLE, CA
 Latitude: 36-58-00.08N NAD 83
 Longitude: 121-46-43.47W
 Heights: 199 feet site elevation (SE)
 80 feet above ground level (AGL)
 279 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6950-OE.

Signature Control No: 201107557-205349637

(DNE)

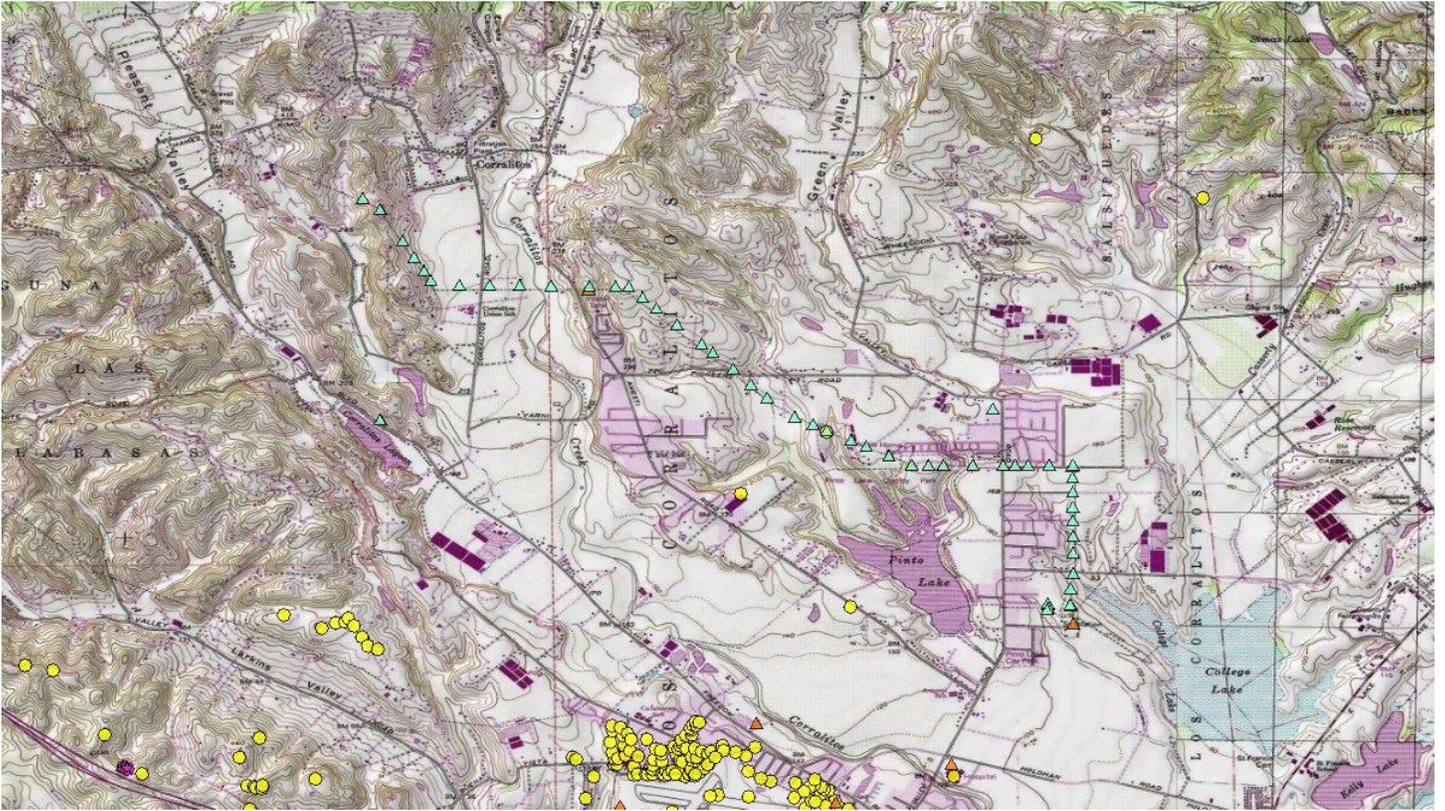
Karen McDonald
Specialist

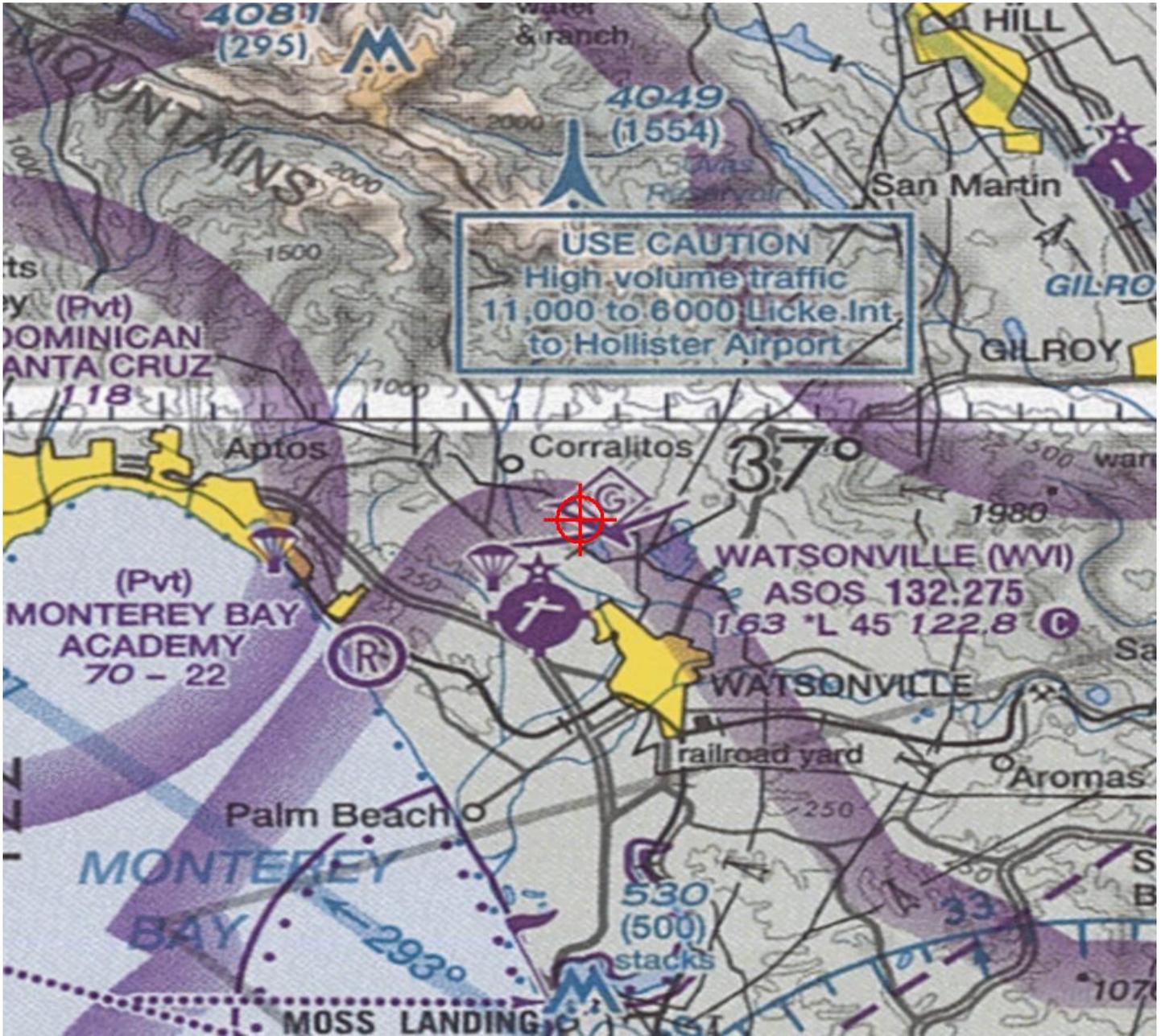
Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6950-OE

PROPOSEING TO INSTALL 28 OF 55 POLES FOR 115 kV REINFORCEMENT PROJECT

Verified Map for ASN 2013-AWP-6950-OE







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6951-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr 1/23
 Location: Watsonville, CA
 Latitude: 36-57-57.20N NAD 83
 Longitude: 121-46-36.51W
 Heights: 194 feet site elevation (SE)
 85 feet above ground level (AGL)
 279 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6951-OE.

Signature Control No: 201107558-205349624

(DNE)

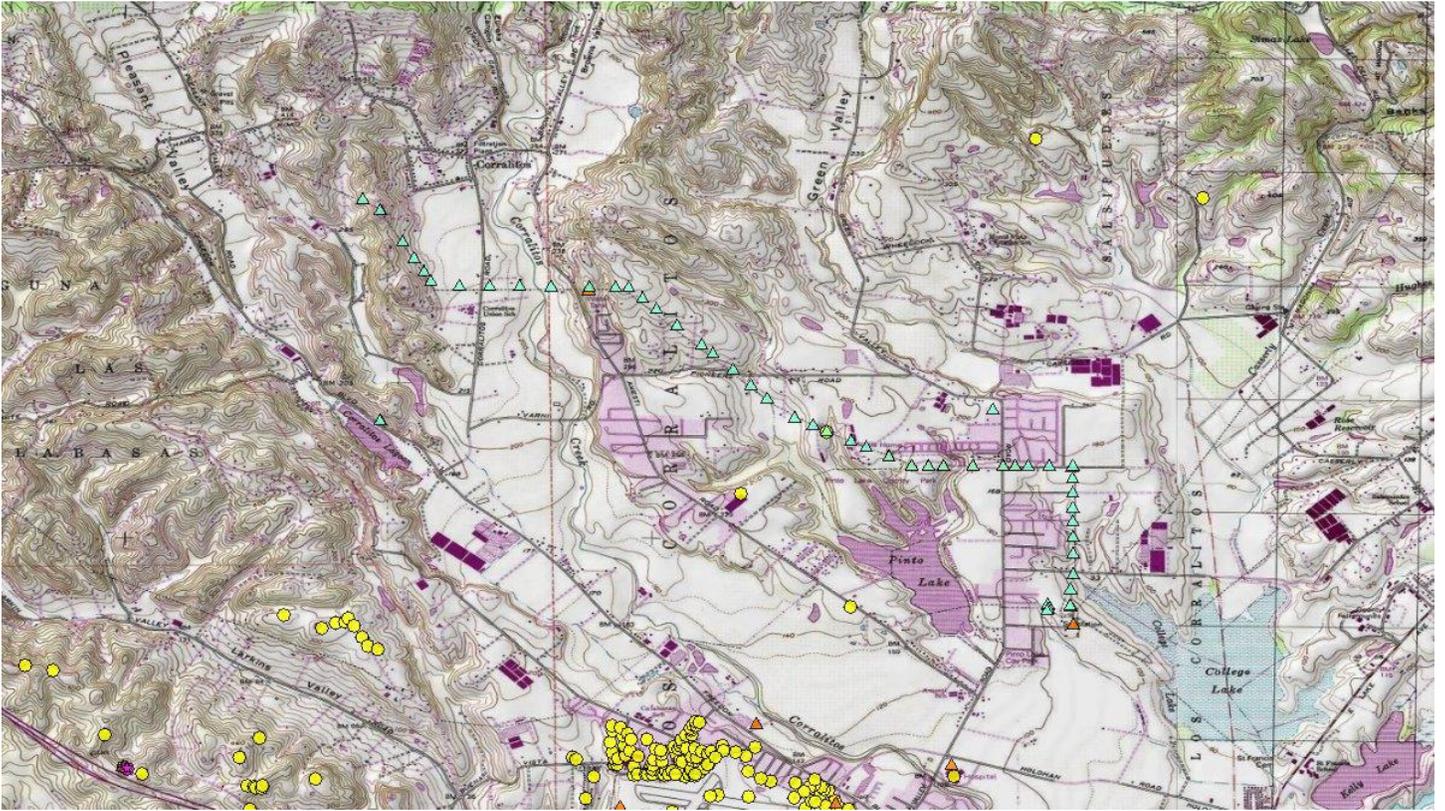
Karen McDonald
Specialist

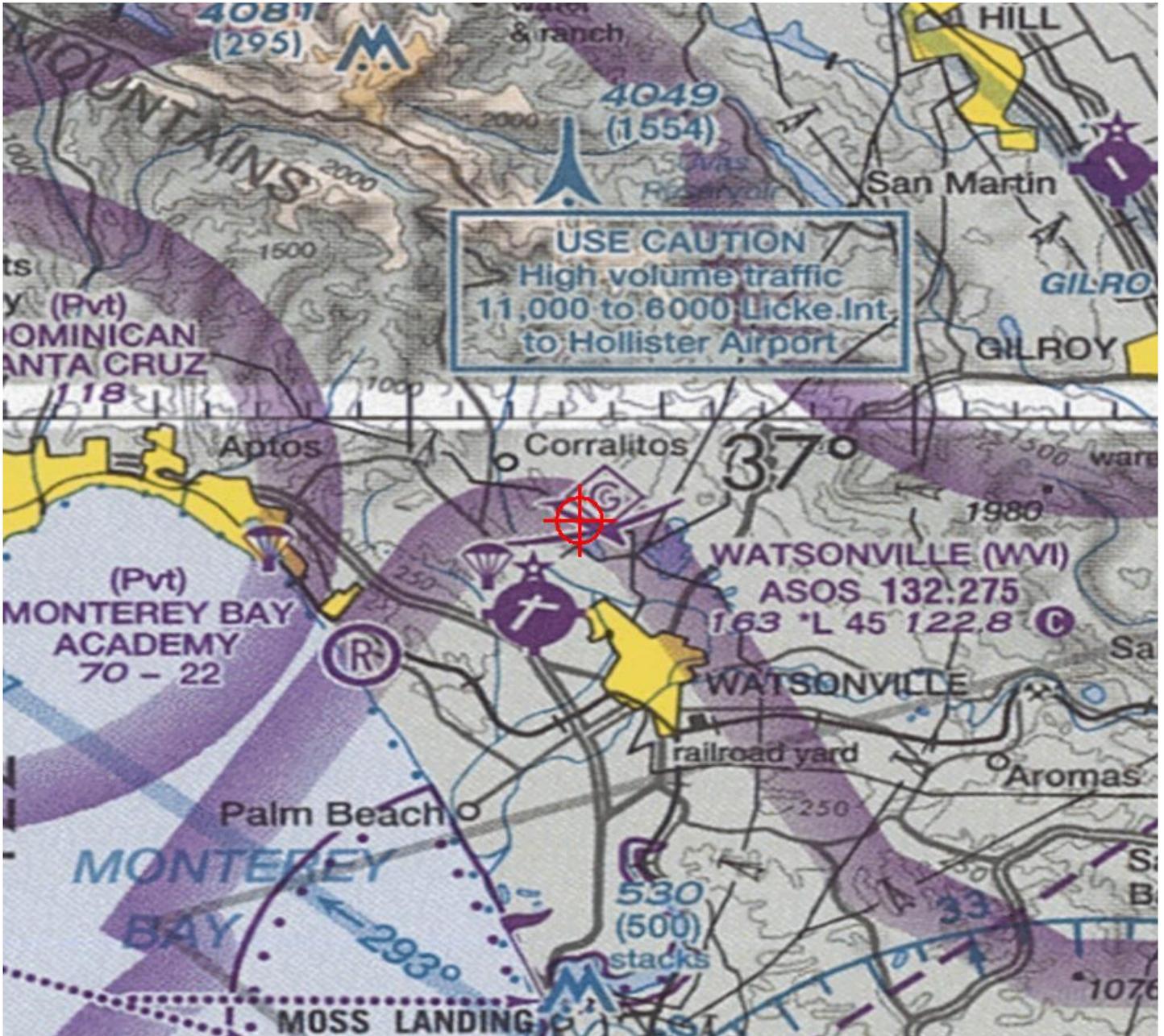
Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6951-OE

PROPOSEING TO INSTALL 27 OF 55 POLES FOR 115 kV REINFORCEMENT PROJECT

Verified Map for ASN 2013-AWP-6951-OE







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6952-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr #2 0/1
 Location: WATSONVILLE, CA
 Latitude: 36-57-08.80N NAD 83
 Longitude: 121-45-40.50W
 Heights: 126 feet site elevation (SE)
 70 feet above ground level (AGL)
 196 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6952-OE.

Signature Control No: 201107559-205349622

(DNE)

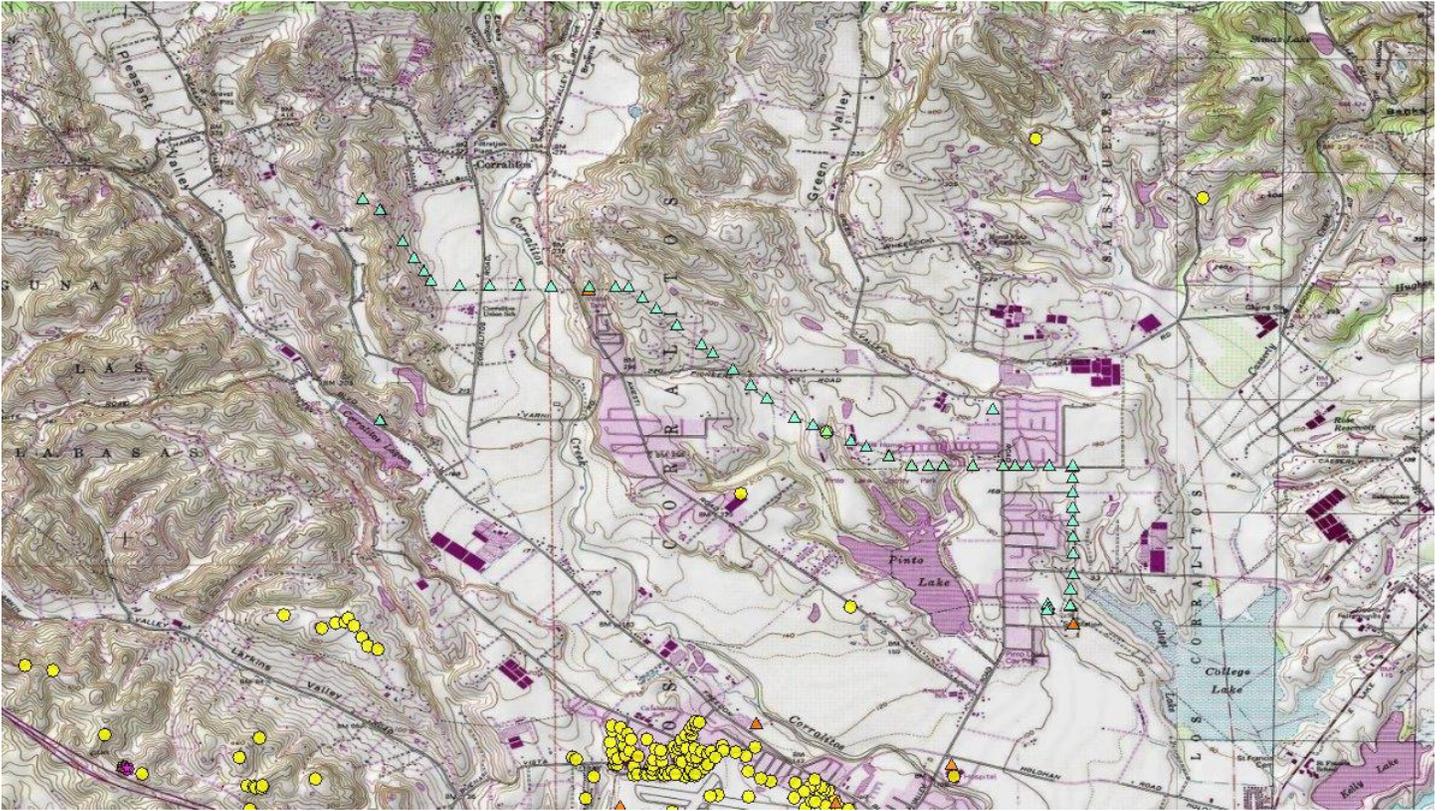
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6952-OE

PROPOSING TO INSTALL OR REPLACE 1 OF 55 IN A 115 kV REINFORCEMENT PROJECT

Verified Map for ASN 2013-AWP-6952-OE





Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6953-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr 0/1
 Location: WATSONVILLE, CA
 Latitude: 36-57-09.38N NAD 83
 Longitude: 121-45-40.23W
 Heights: 126 feet site elevation (SE)
 70 feet above ground level (AGL)
 196 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6953-OE.

Signature Control No: 201107560-205349634

(DNE)

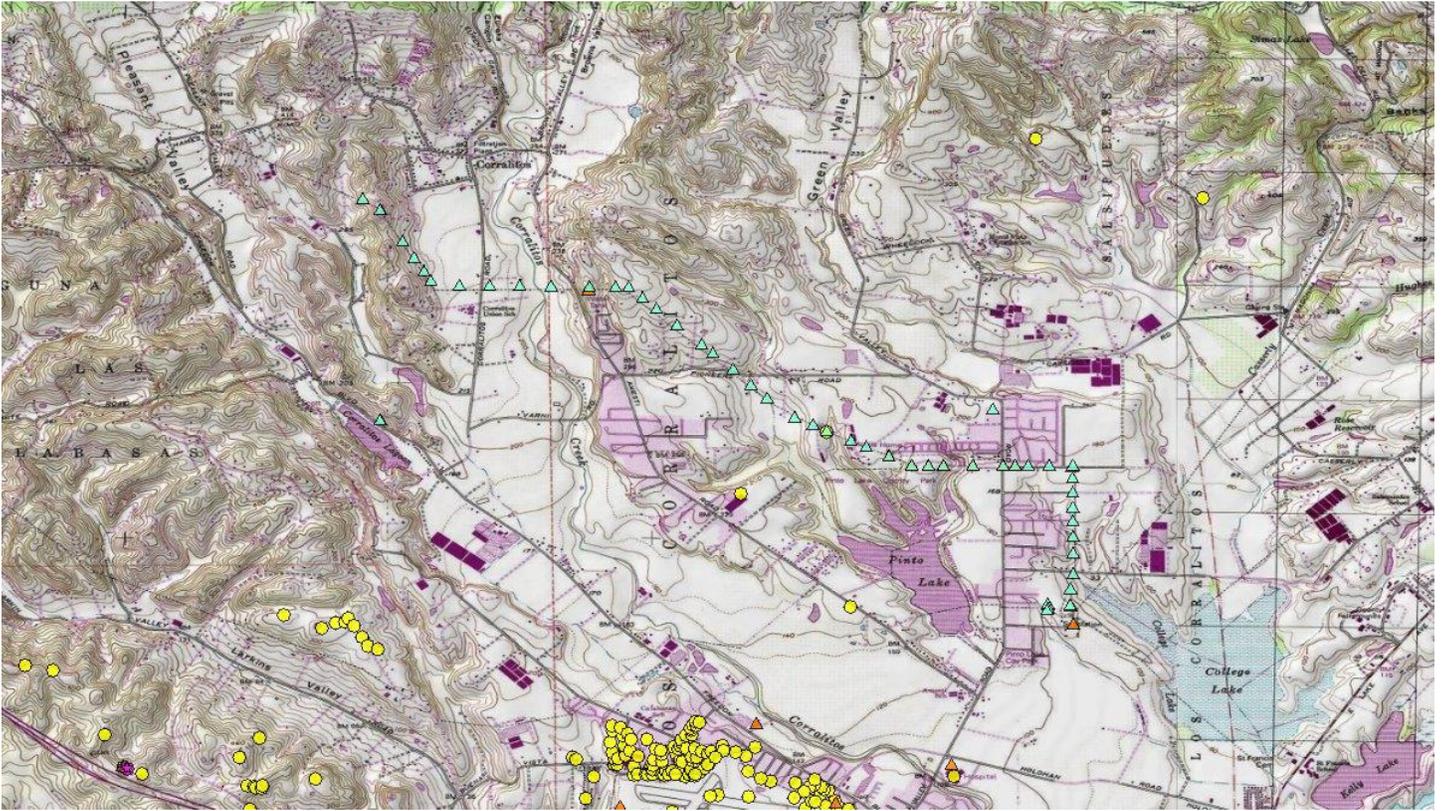
Karen McDonald
Specialist

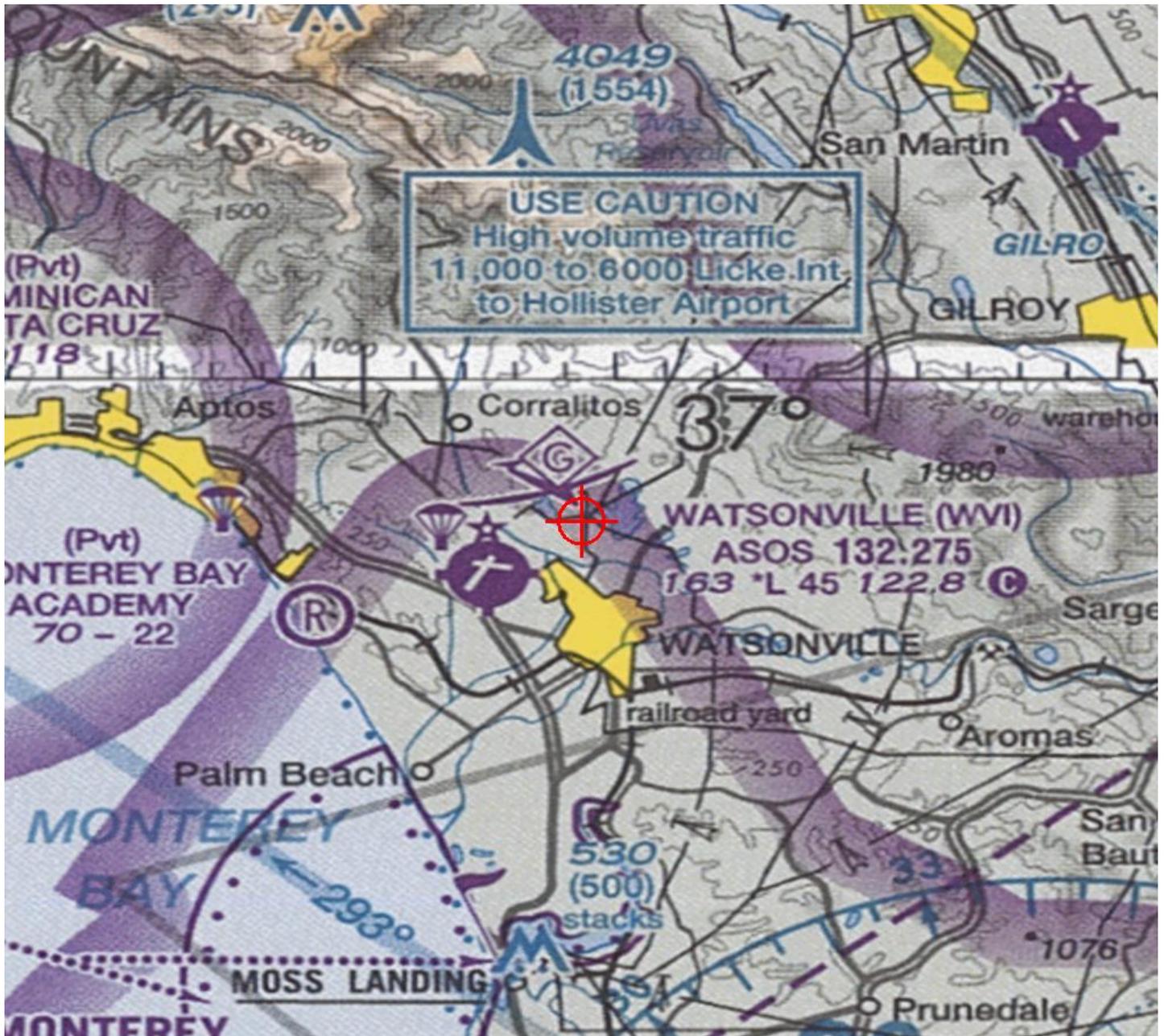
Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6953-OE

PROPOSING TO INSTALL OR REPLACE 2 OF 55 IN A 115 kV REINFORCEMENT PROJECT

Verified Map for ASN 2013-AWP-6953-OE







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6954-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr #2 0/2
 Location: WATSONVILLE, CA
 Latitude: 36-57-10.54N NAD 83
 Longitude: 121-45-40.37W
 Heights: 128 feet site elevation (SE)
 85 feet above ground level (AGL)
 213 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6954-OE.

Signature Control No: 201107561-205349629

(DNE)

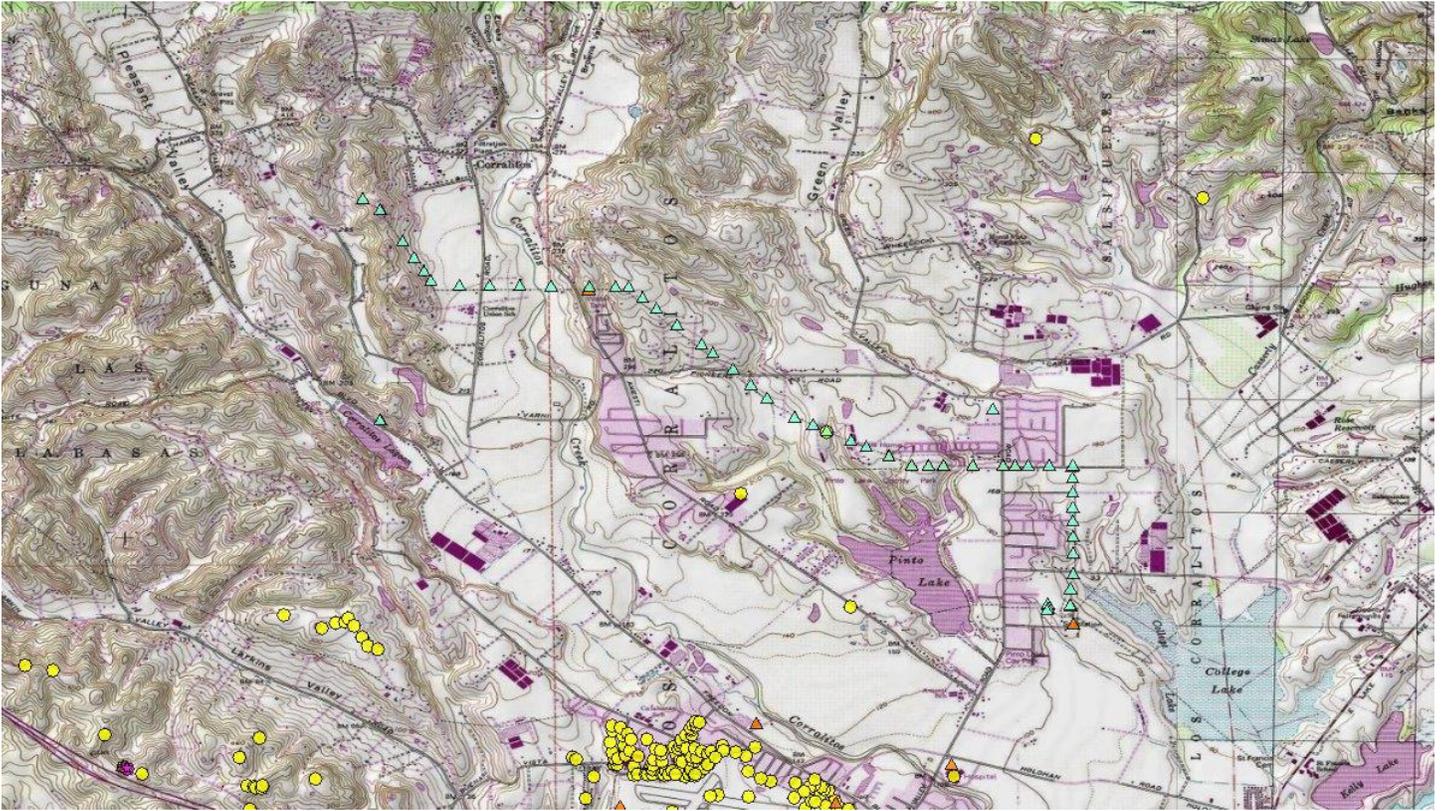
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6954-OE

PROPOSING TO INSTALL OR REPLACE 3 OF 55 IN A 115 kV REINFORCEMENT PROJECT

Verified Map for ASN 2013-AWP-6954-OE





Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6955-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr 0/2
 Location: WATSONVILLE, CA
 Latitude: 36-57-10.38N NAD 83
 Longitude: 121-45-40.16W
 Heights: 128 feet site elevation (SE)
 85 feet above ground level (AGL)
 213 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6955-OE.

Signature Control No: 201107562-205349626

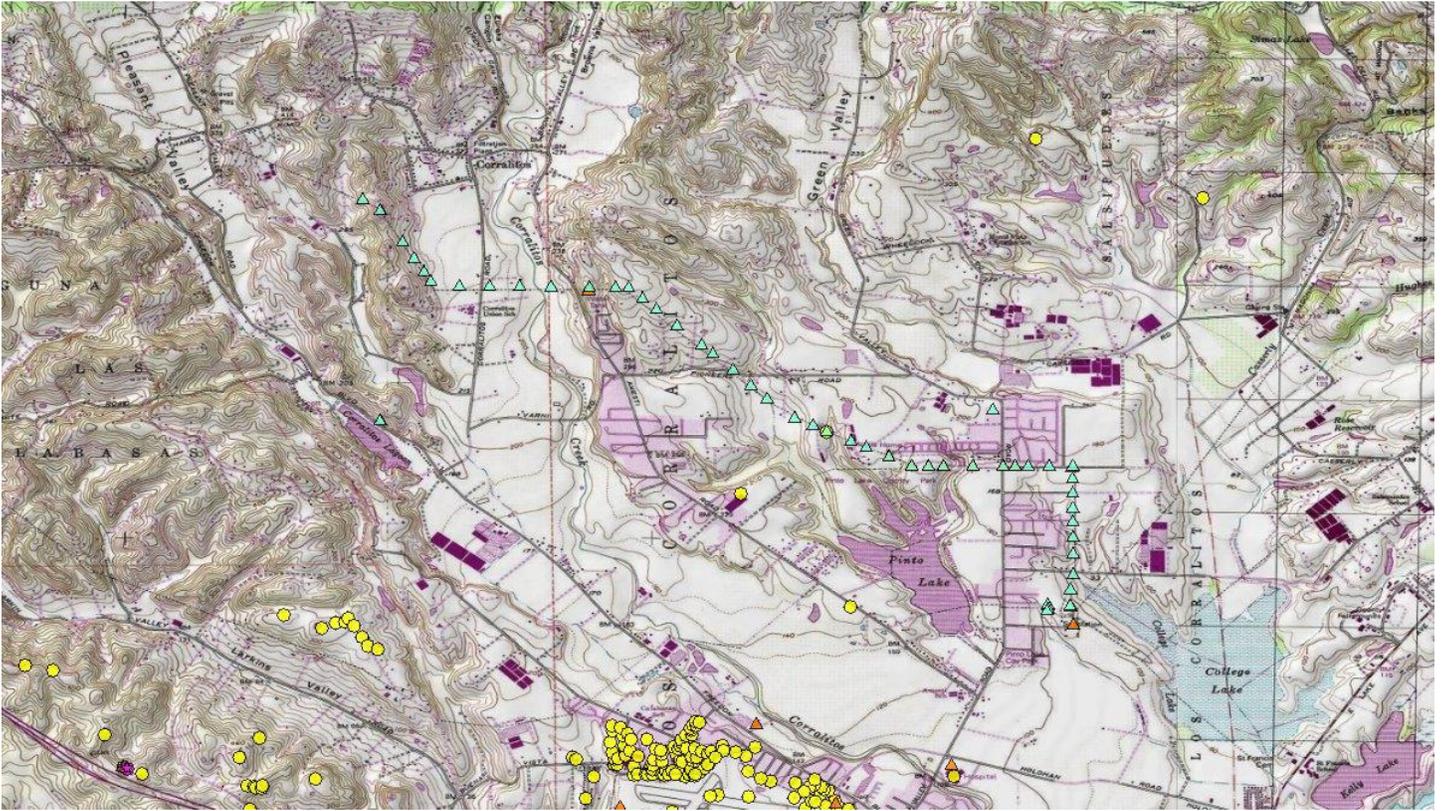
(DNE)

Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6955-OE

PROPOSING TO INSTALL OR REPLACE 4 OF 55 IN A 115 kV REINFORCEMENT PROJECT





Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6956-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr #2 0/3
 Location: WATSONVILLE, CA
 Latitude: 36-57-10.24N NAD 83
 Longitude: 121-45-33.93W
 Heights: 122 feet site elevation (SE)
 90 feet above ground level (AGL)
 212 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6956-OE.

Signature Control No: 201107563-205349630

(DNE)

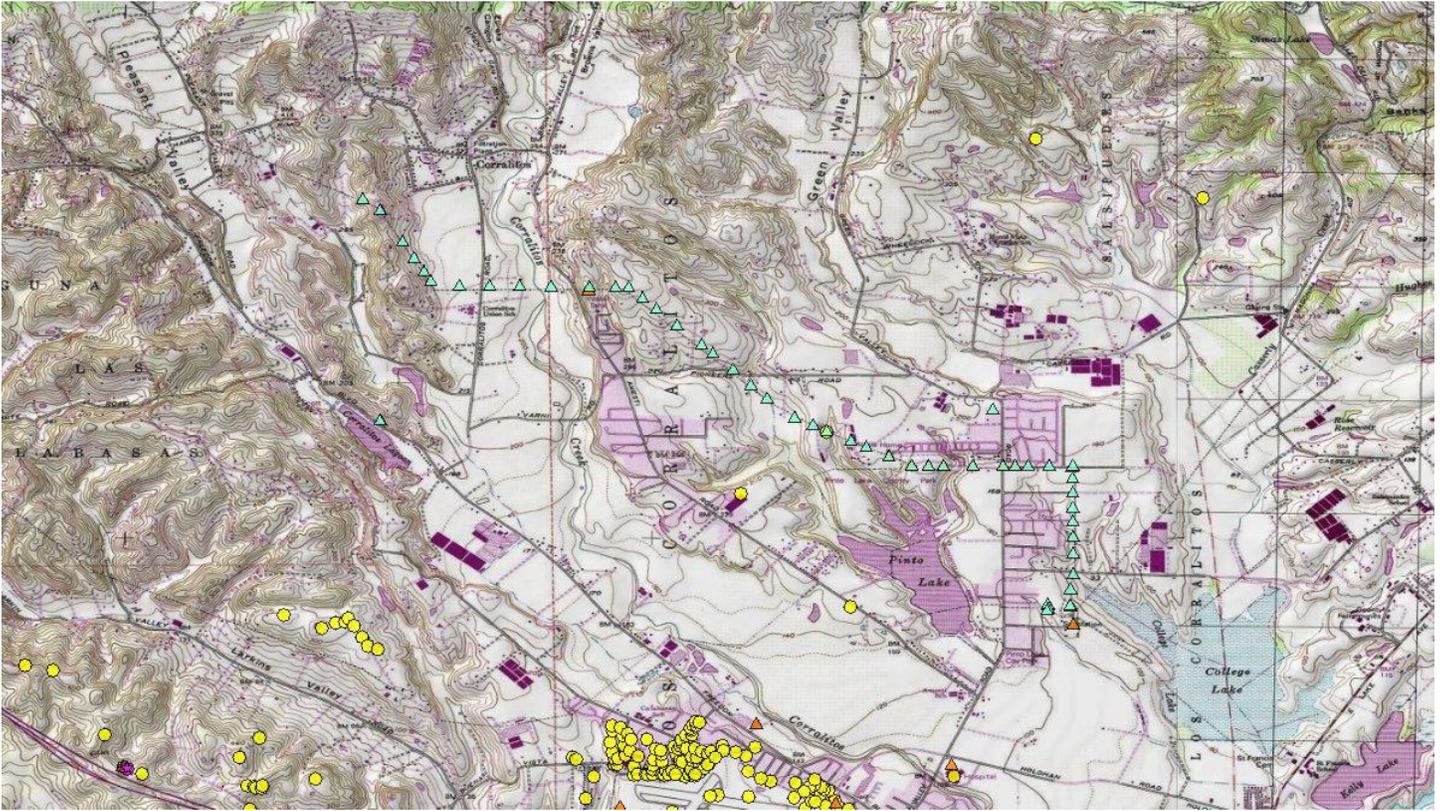
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6956-OE

PROPOSING TO INSTALL OR REPLACE 5 OF 55 IN A 115 kV REINFORCEMENT PROJECT

Verified Map for ASN 2013-AWP-6956-OE





Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6957-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr 0/3
 Location: WATSONVILLE, CA
 Latitude: 36-57-10.08N NAD 83
 Longitude: 121-45-33.68W
 Heights: 121 feet site elevation (SE)
 90 feet above ground level (AGL)
 211 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6957-OE.

Signature Control No: 201107564-205349631

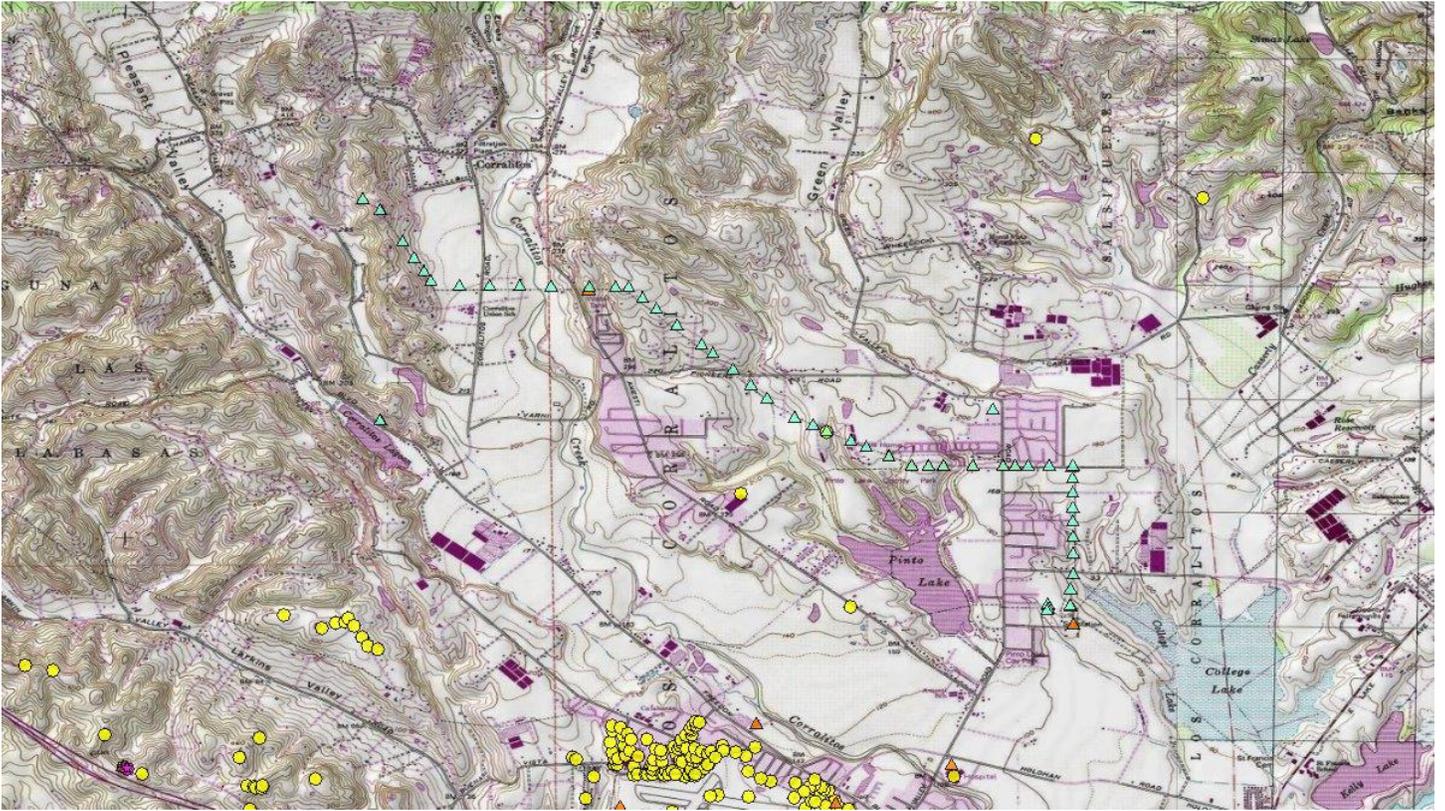
(DNE)

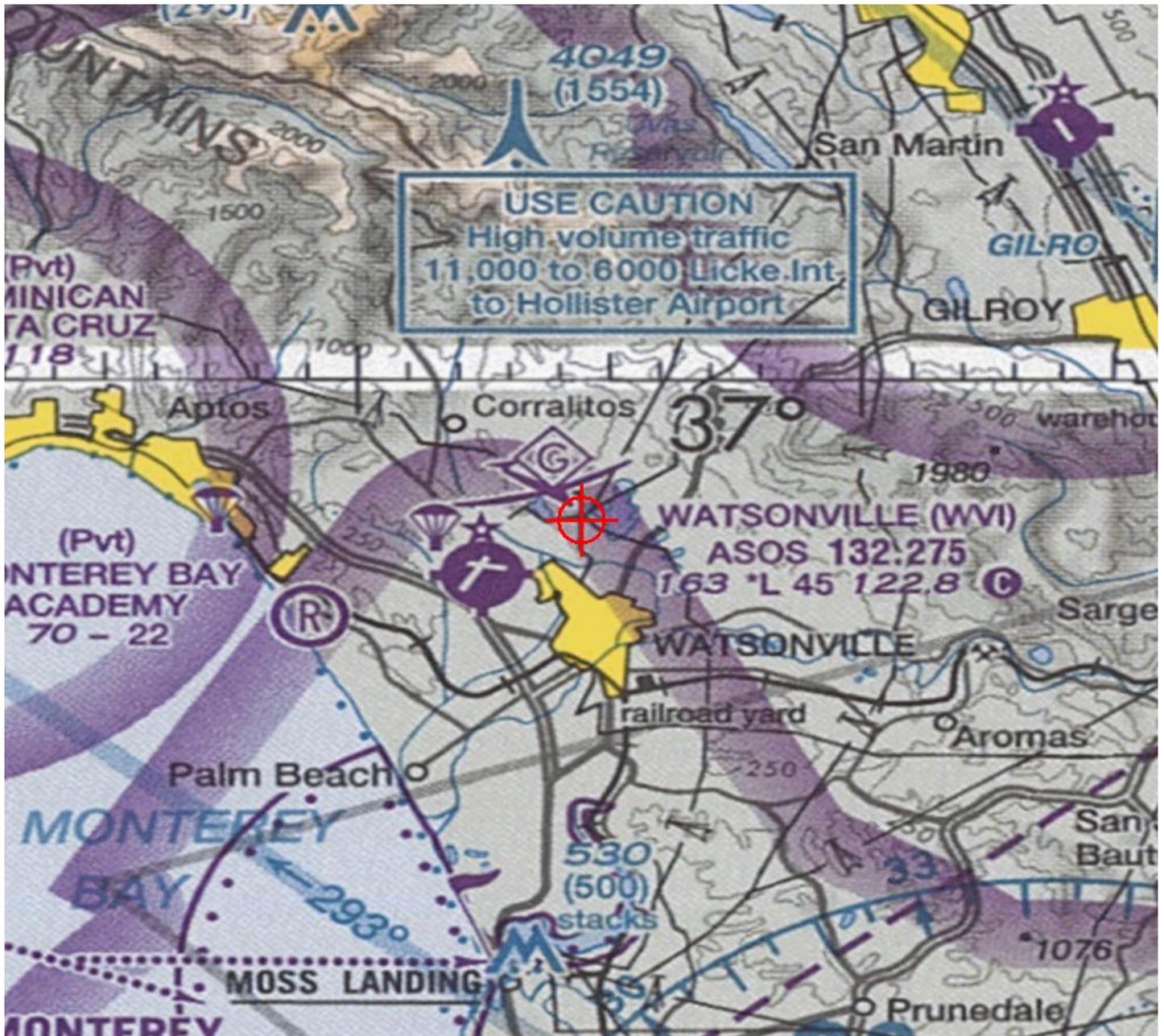
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6957-OE

PROPOSING TO INSTALL OR REPLACE 6 OF 55 IN A 115 kV REINFORCEMENT PROJECT







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6958-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr 0/4
 Location: WATSONVILLE, CA
 Latitude: 36-57-14.91N NAD 83
 Longitude: 121-45-33.83W
 Heights: 99 feet site elevation (SE)
 80 feet above ground level (AGL)
 179 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6958-OE.

Signature Control No: 201107565-205349621

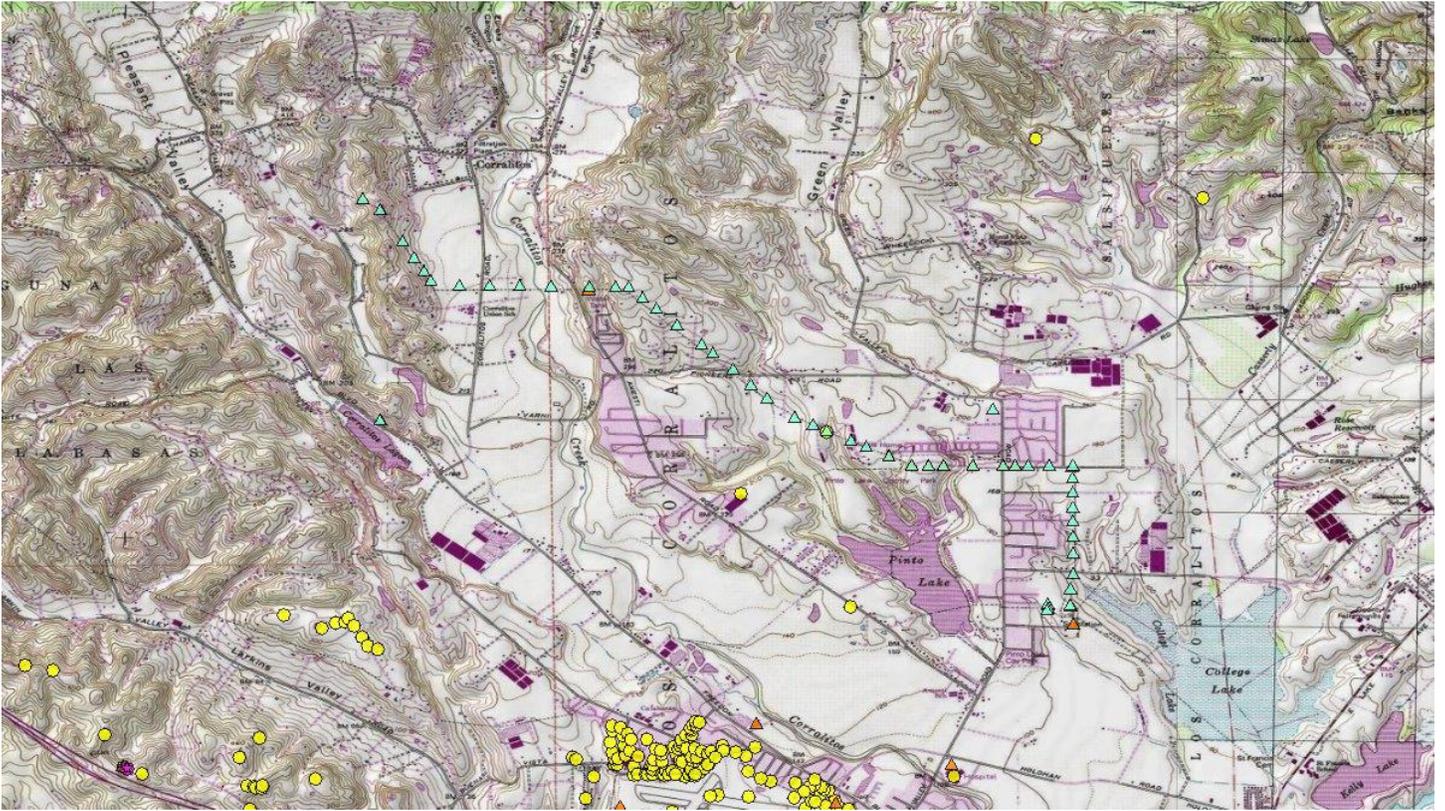
(DNE)

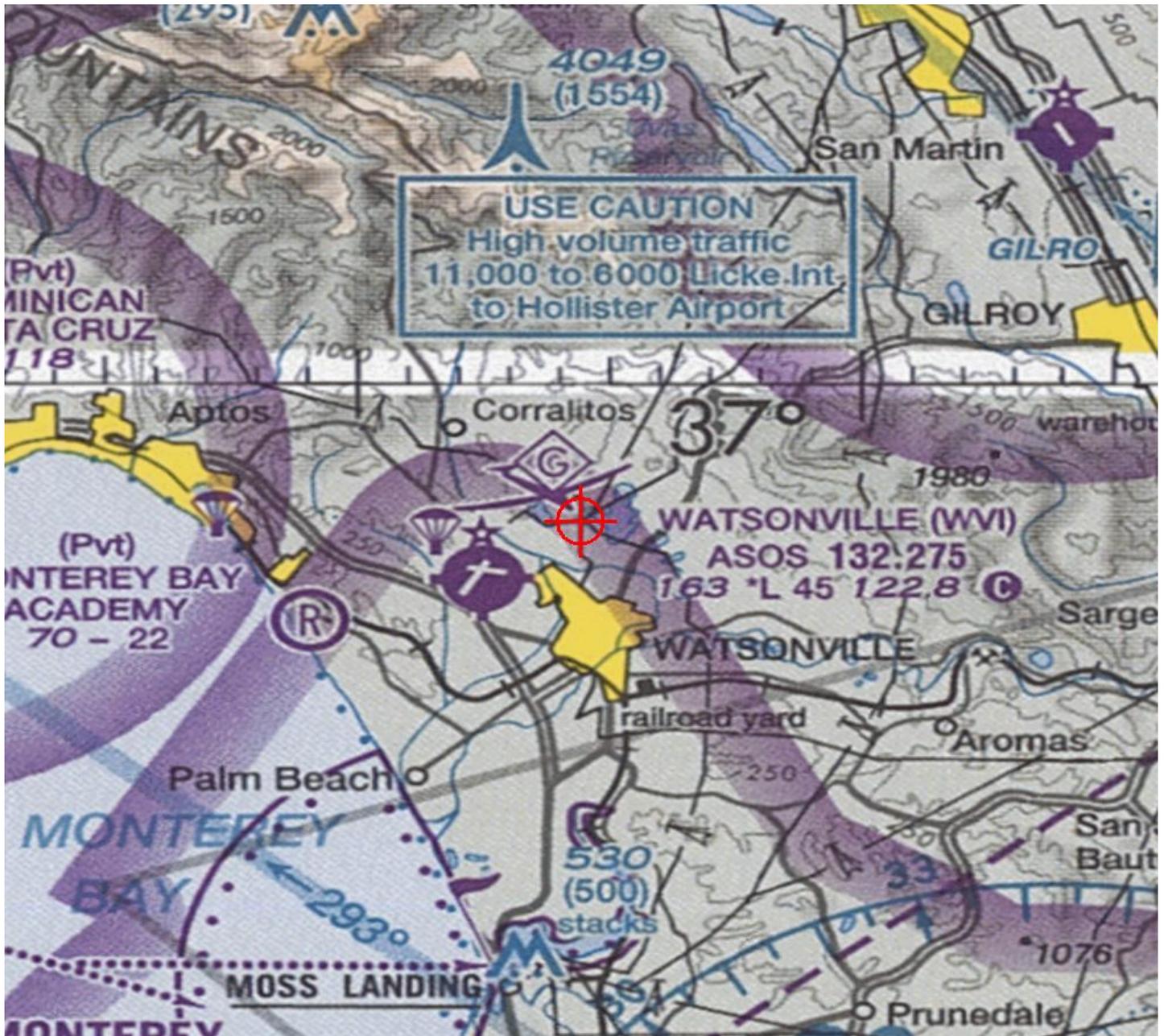
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6958-OE

PROPOSING TO INSTALL OR REPLACE 7 OF 55 IN A 115 kV REINFORCEMENT PROJECT







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6959-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr 0/5
 Location: WATSONVILLE, CA
 Latitude: 36-57-19.13N NAD 83
 Longitude: 121-45-33.04W
 Heights: 78 feet site elevation (SE)
 95 feet above ground level (AGL)
 173 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6959-OE.

Signature Control No: 201107566-205349632

(DNE)

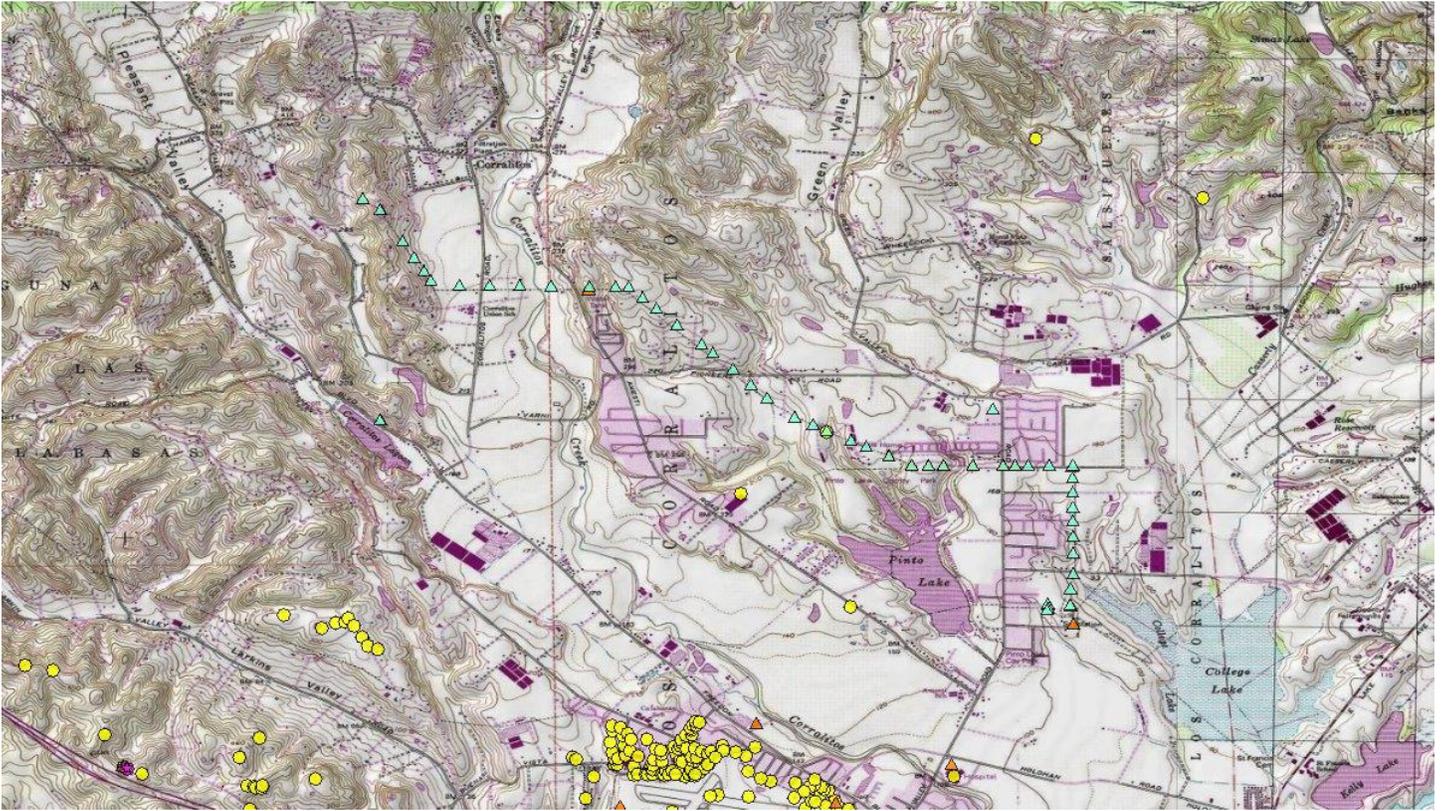
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6959-OE

PROPOSING TO INSTALL OR REPLACE 8 OF 55 IN A 115 kV REINFORCEMENT PROJECT

Verified Map for ASN 2013-AWP-6959-OE





Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6960-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr 0/6
 Location: WATSONVILLE, CA
 Latitude: 36-57-25.12N NAD 83
 Longitude: 121-45-33.07W
 Heights: 99 feet site elevation (SE)
 85 feet above ground level (AGL)
 184 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6960-OE.

Signature Control No: 201107567-205349638

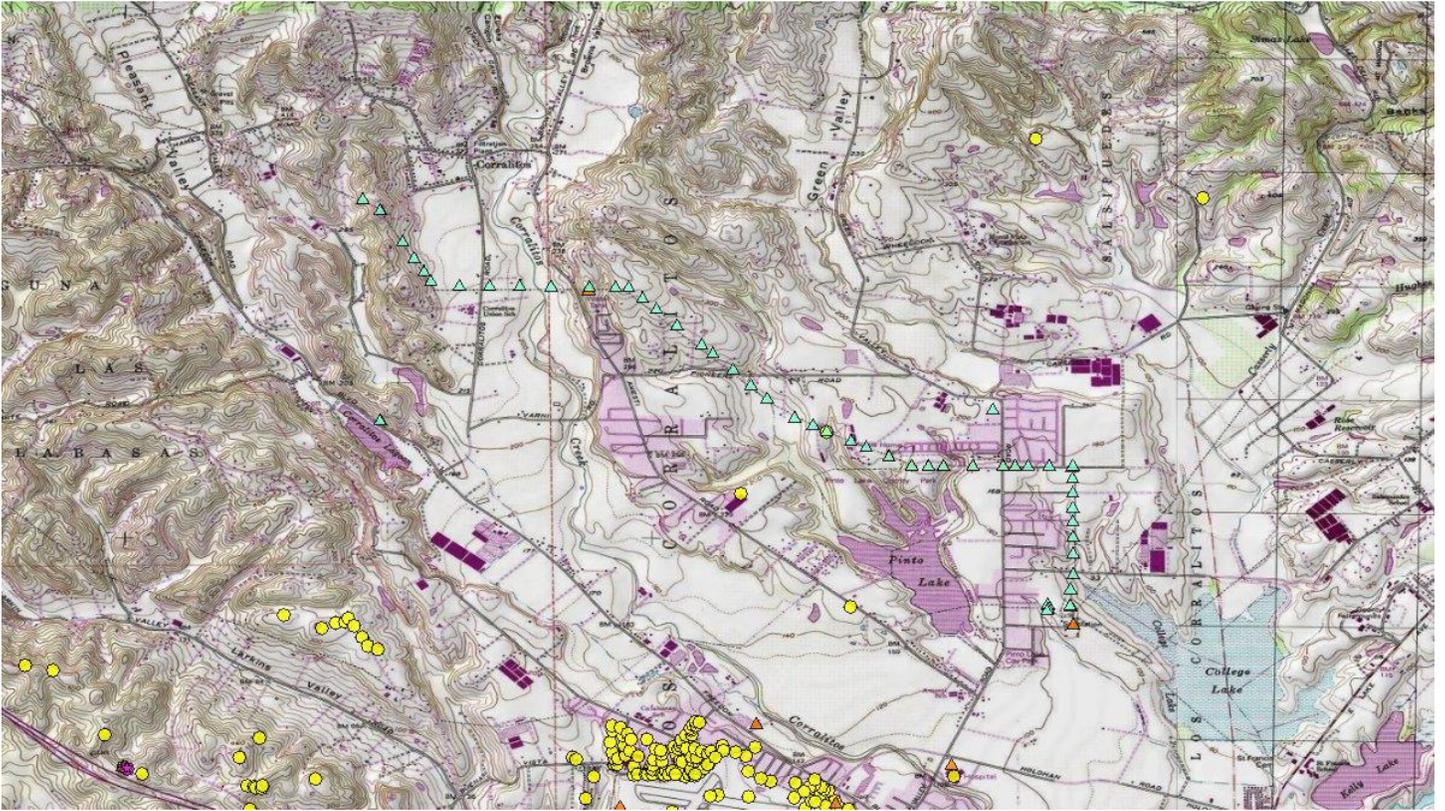
(DNE)

Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6960-OE

PROPOSING TO INSTALL OR REPLACE 9 OF 55 IN A 115 kV REINFORCEMENT PROJECT





Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6961-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr 0/7
 Location: WATSONVILLE, CA
 Latitude: 36-57-29.83N NAD 83
 Longitude: 121-45-33.10W
 Heights: 118 feet site elevation (SE)
 85 feet above ground level (AGL)
 203 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6961-OE.

Signature Control No: 201107568-205349619

(DNE)

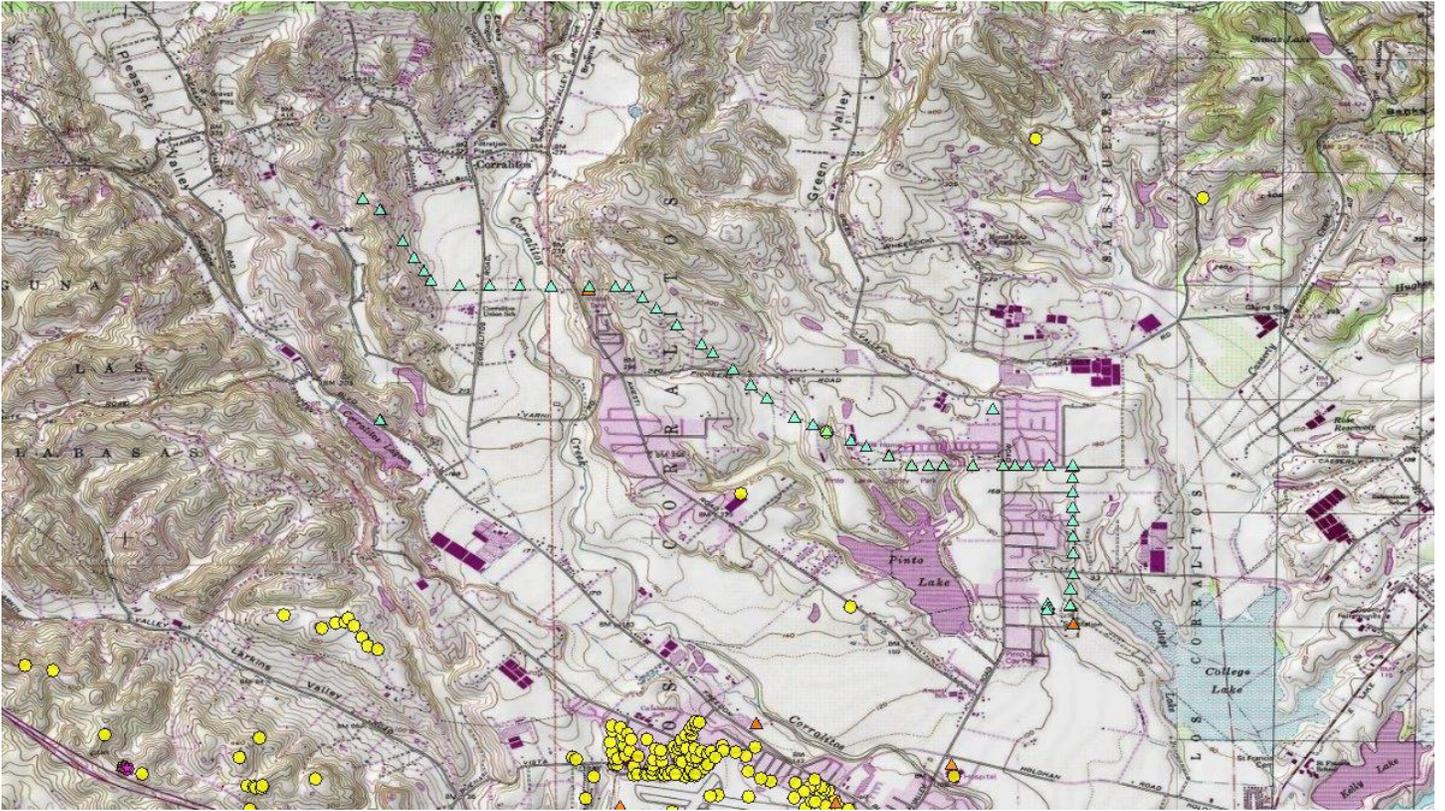
Karen McDonald
Specialist

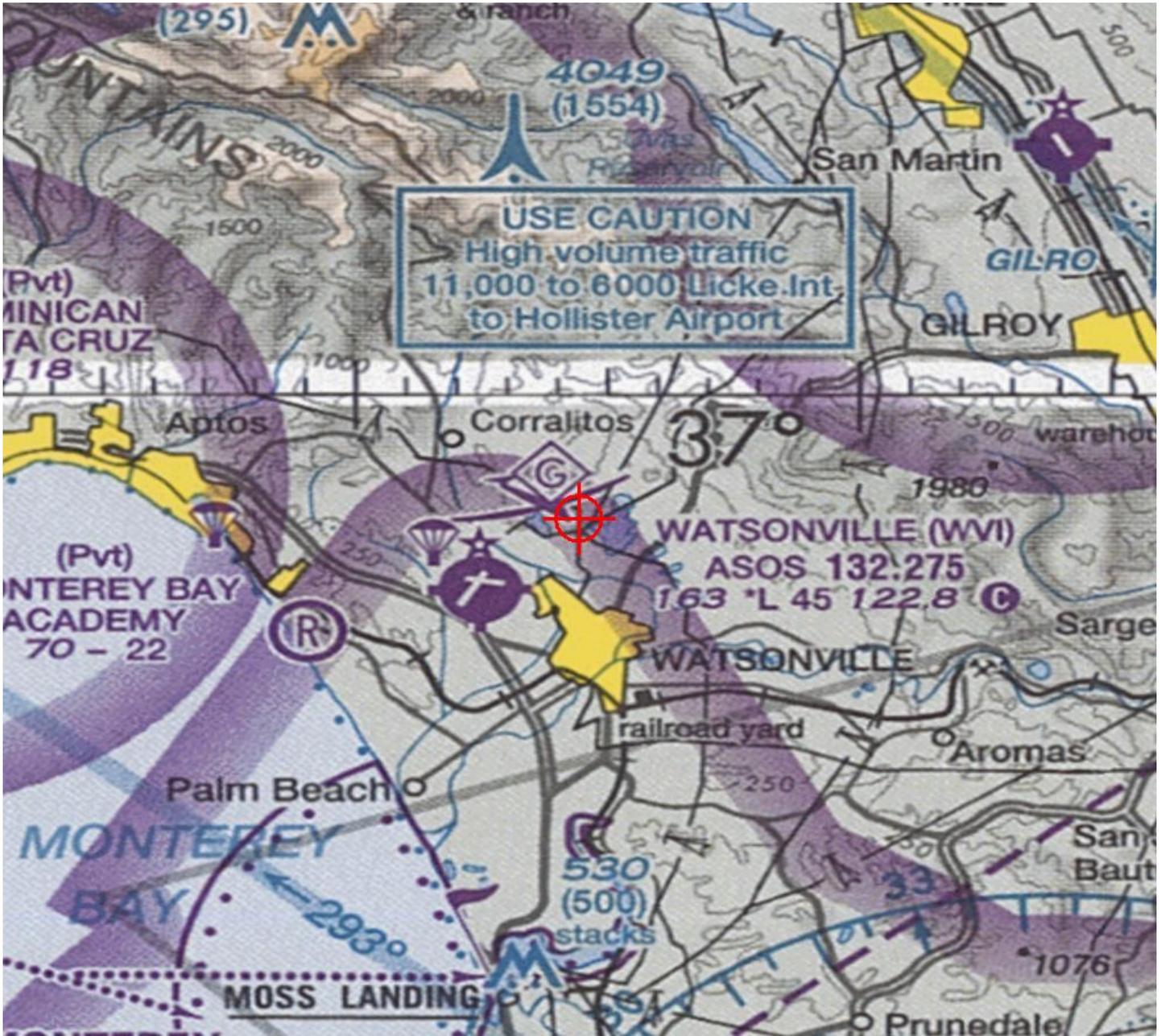
Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6961-OE

PROPOSING TO INSTALL OR REPLACE 10 OF 55 IN A 115 kV REINFORCEMENT PROJECT

Verified Map for ASN 2013-AWP-6961-OE







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6962-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr 0/8
 Location: WATSONVILLE, CA
 Latitude: 36-57-34.20N NAD 83
 Longitude: 121-45-33.14W
 Heights: 150 feet site elevation (SE)
 85 feet above ground level (AGL)
 235 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6962-OE.

Signature Control No: 201107569-205349620

(DNE)

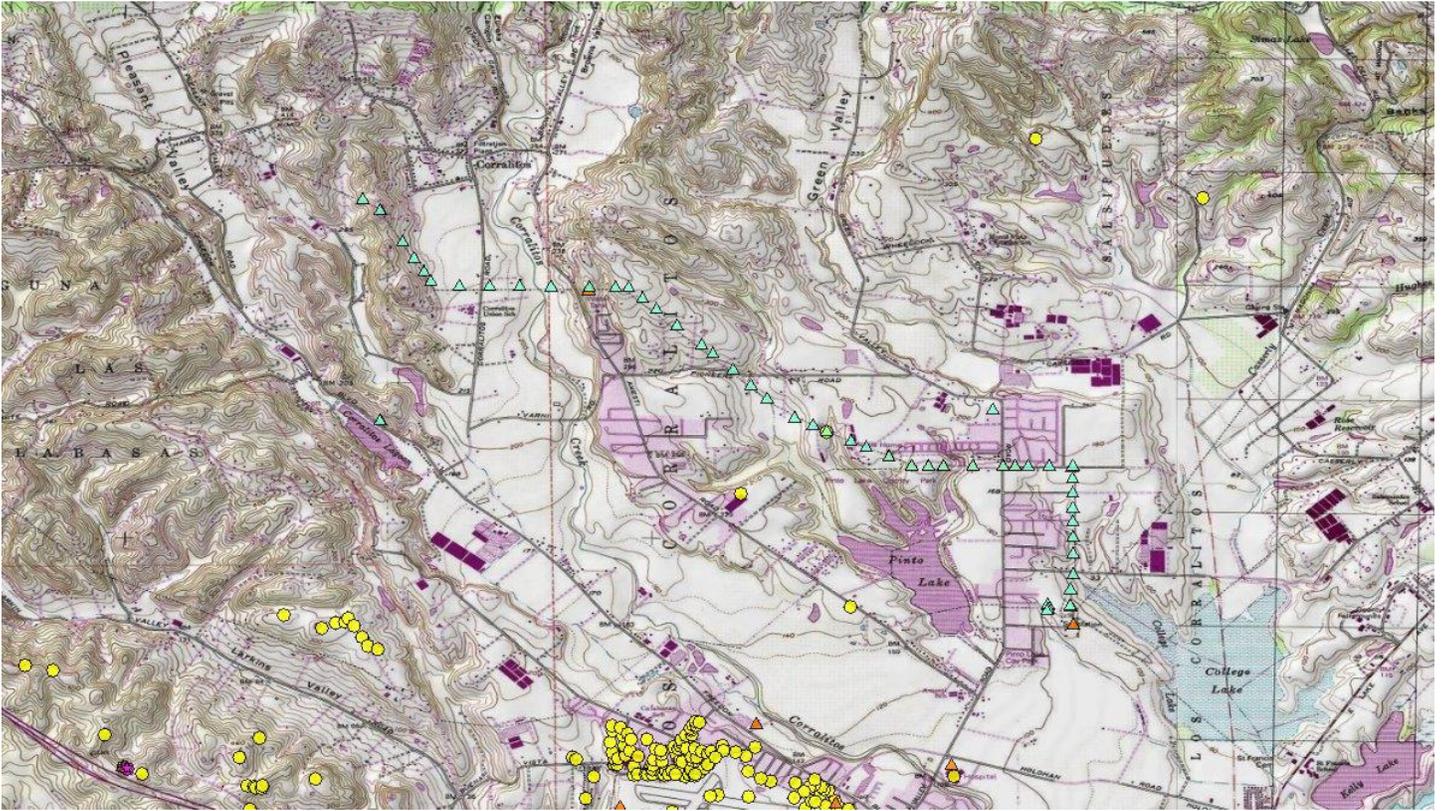
Karen McDonald
Specialist

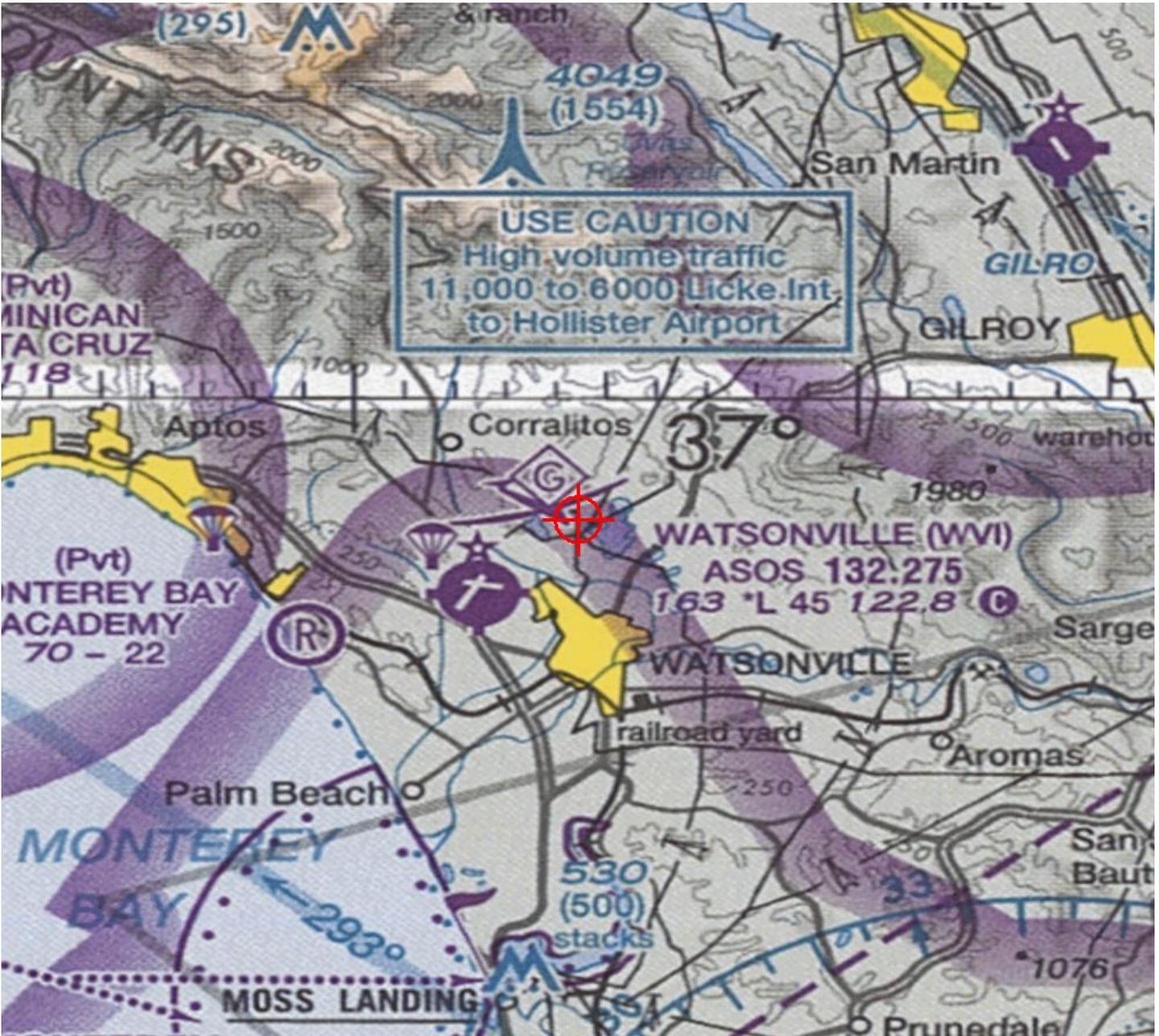
Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6962-OE

PROPOSING TO INSTALL OR REPLACE 11 OF 55 IN A 115 kV REINFORCEMENT PROJECT

Verified Map for ASN 2013-AWP-6962-OE







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6963-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr 0/9
 Location: WATSONVILLE, CA
 Latitude: 36-57-38.23N NAD 83
 Longitude: 121-45-33.17W
 Heights: 153 feet site elevation (SE)
 85 feet above ground level (AGL)
 238 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6963-OE.

Signature Control No: 201107570-205349639

(DNE)

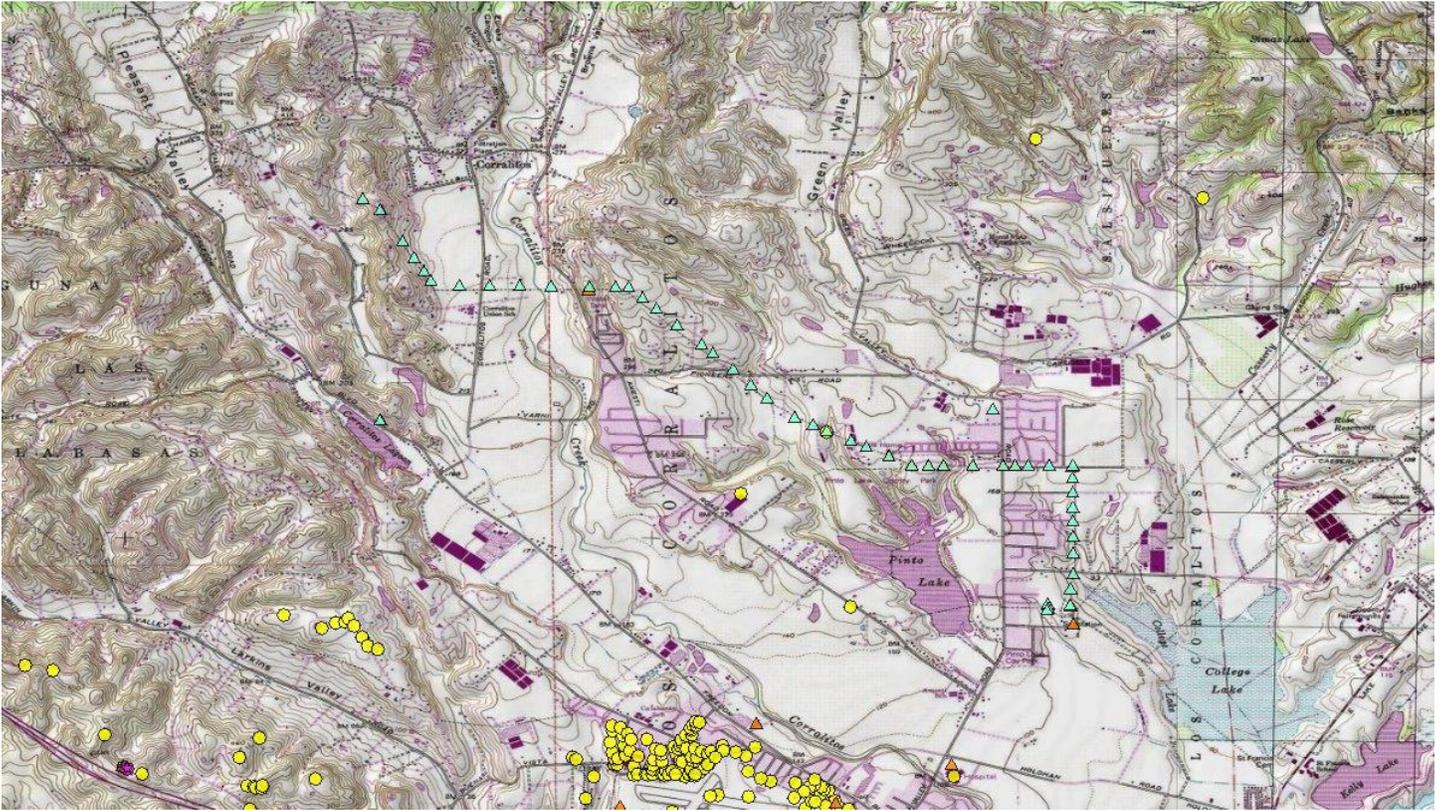
Karen McDonald
Specialist

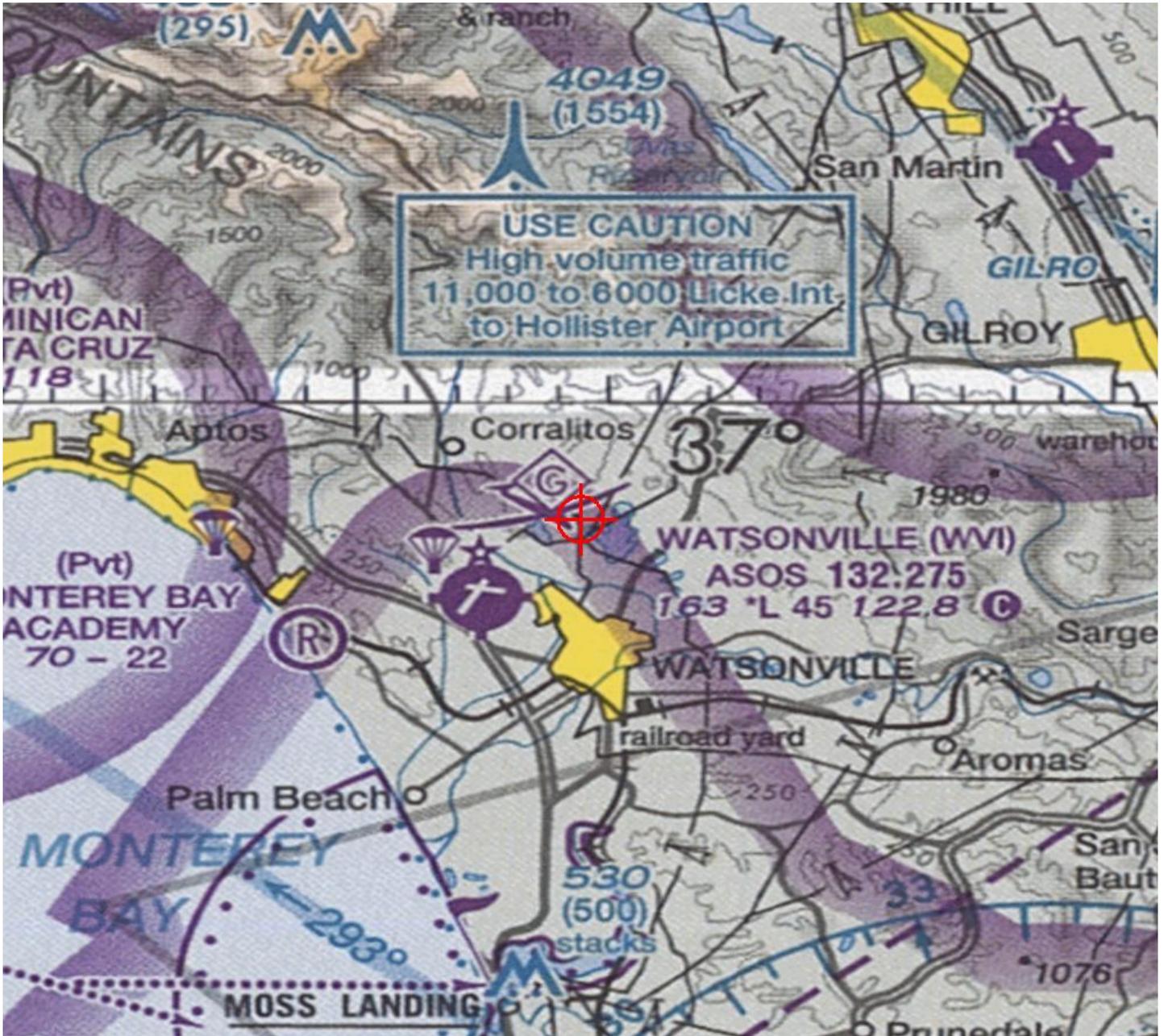
Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6963-OE

PROPOSING TO INSTALL OR REPLACE 12 OF 55 IN A 115 kV REINFORCEMENT PROJECT

Verified Map for ASN 2013-AWP-6963-OE







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6964-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr 0/10
 Location: WATSONVILLE, CA
 Latitude: 36-57-42.38N NAD 83
 Longitude: 121-45-33.20W
 Heights: 158 feet site elevation (SE)
 85 feet above ground level (AGL)
 243 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6964-OE.

Signature Control No: 201107571-205349642

(DNE)

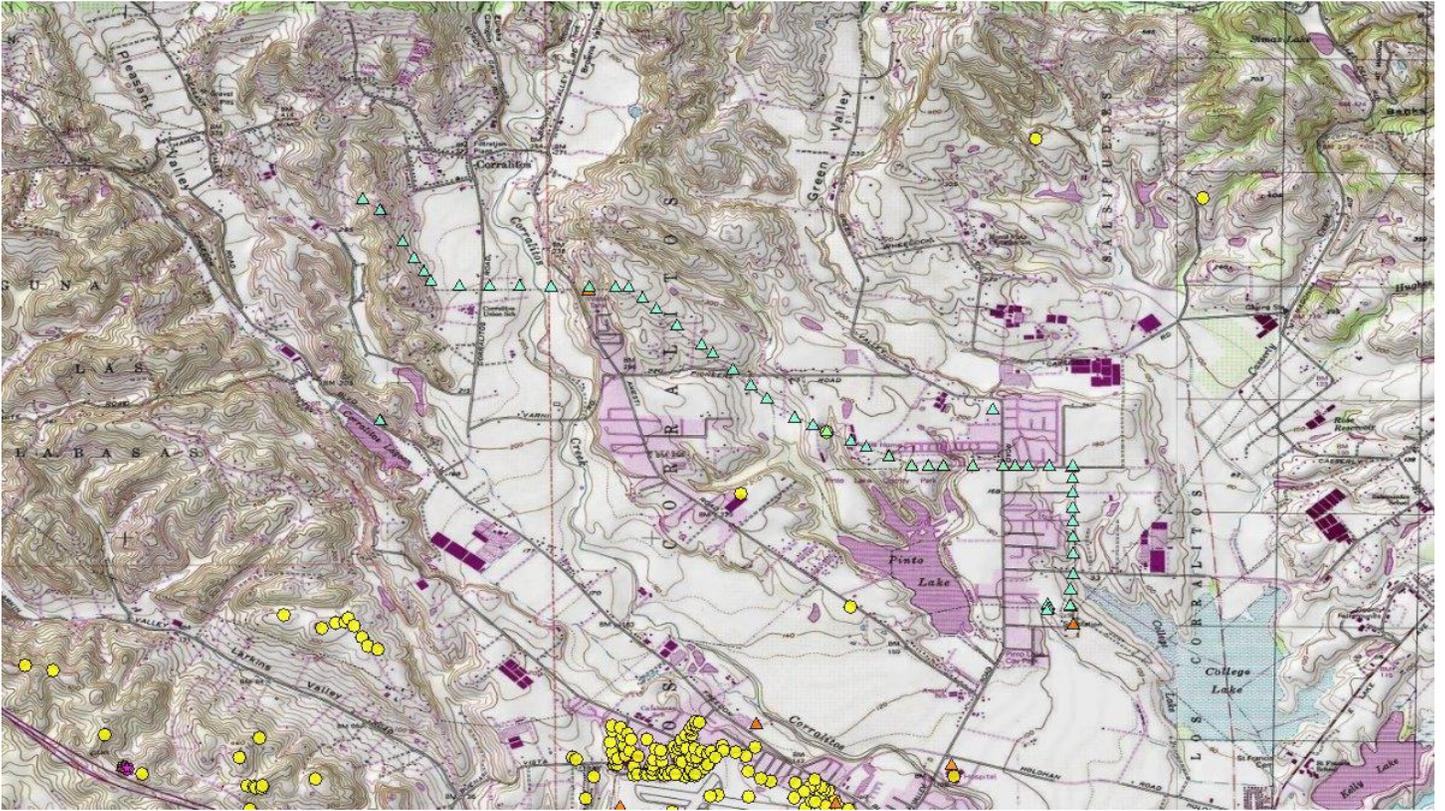
Karen McDonald
Specialist

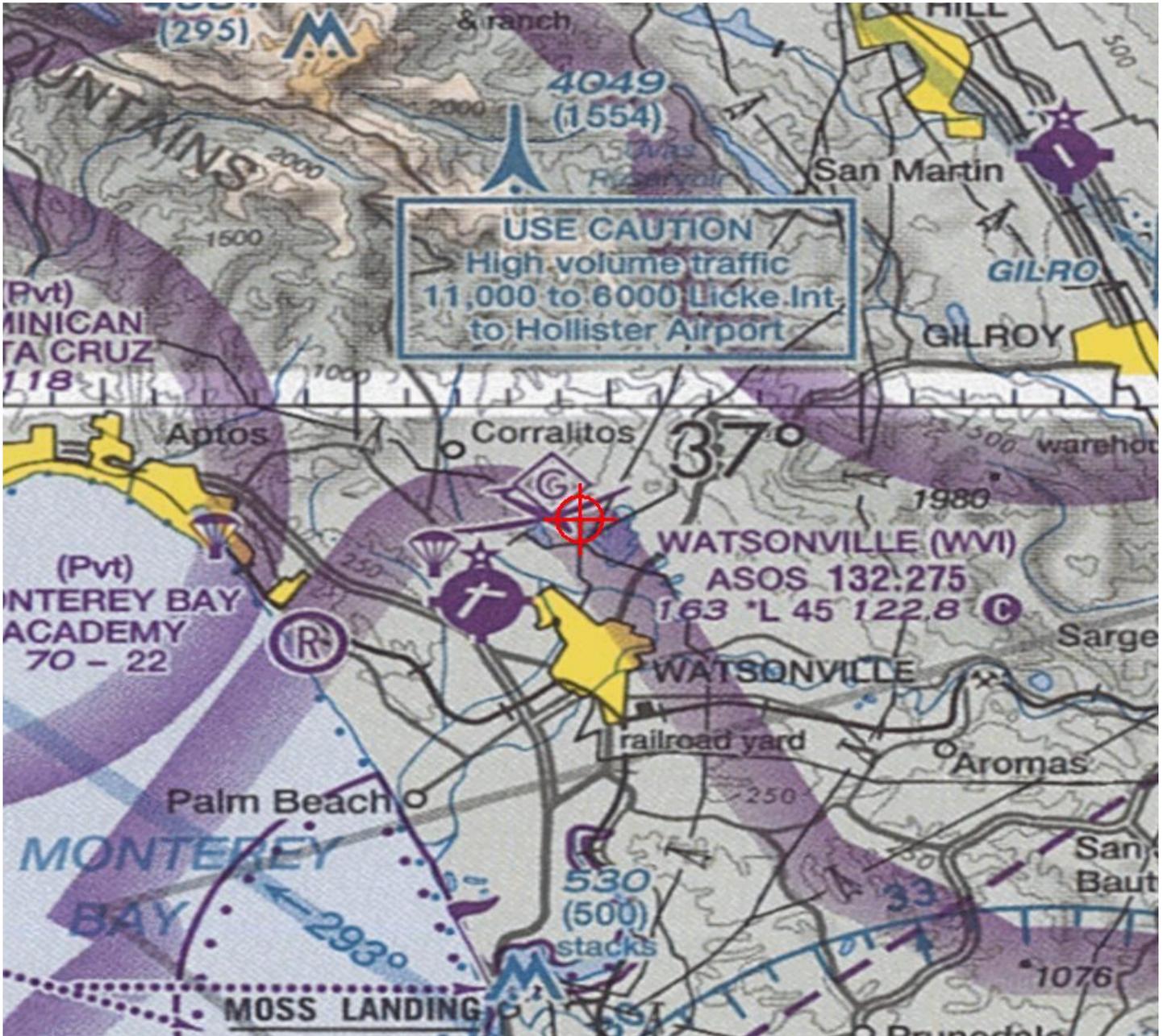
Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6964-OE

PROPOSING TO INSTALL OR REPLACE 13 OF 55 IN A 115 kV REINFORCEMENT PROJECT

Verified Map for ASN 2013-AWP-6964-OE







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6965-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr 0/11
 Location: WATSONVILLE, CA
 Latitude: 36-57-46.49N NAD 83
 Longitude: 121-45-33.24W
 Heights: 171 feet site elevation (SE)
 80 feet above ground level (AGL)
 251 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6965-OE.

Signature Control No: 201107572-205349643

(DNE)

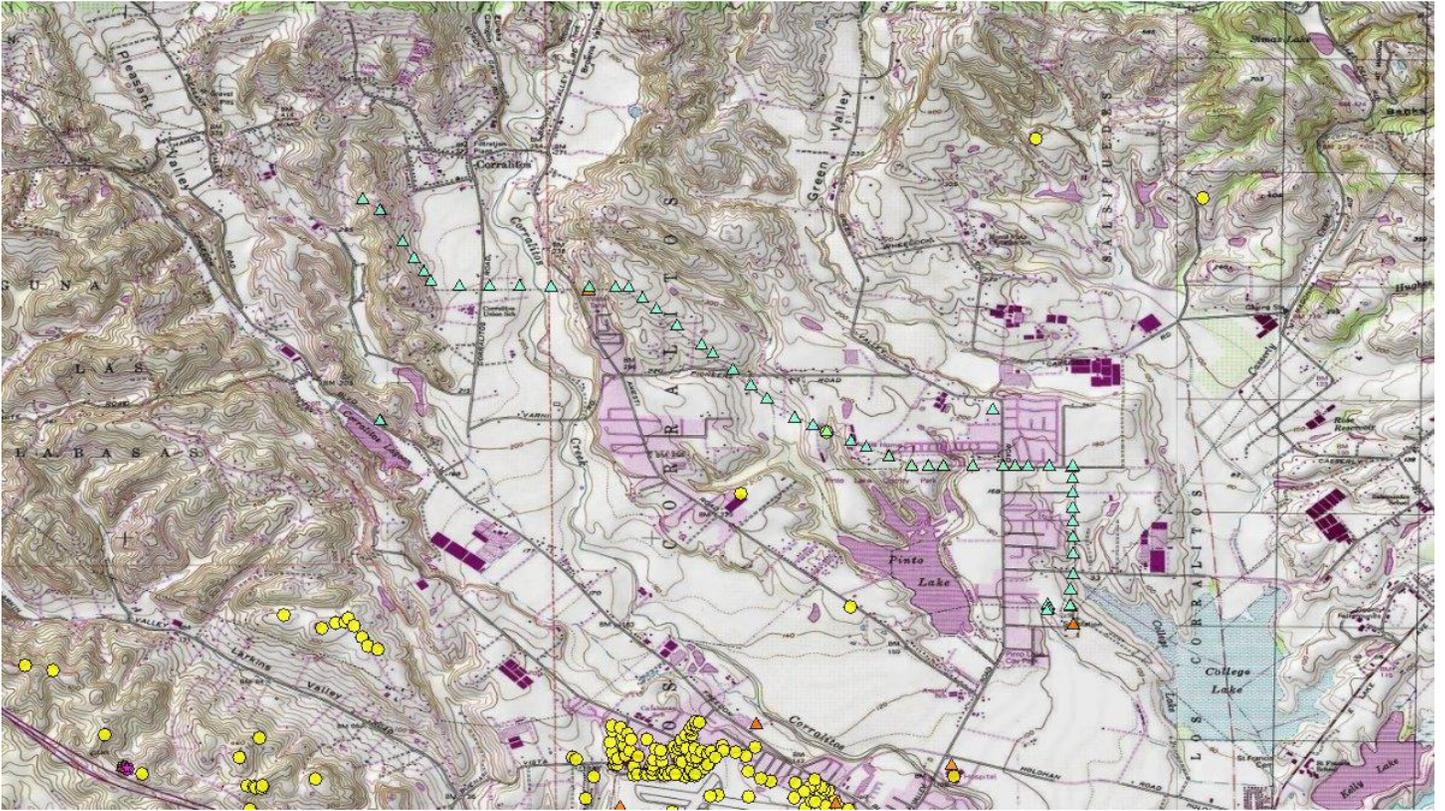
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6965-OE

PROPOSING TO INSTALL OR REPLACE 14 OF 55 IN A 115 kV REINFORCEMENT PROJECT

Verified Map for ASN 2013-AWP-6965-OE





Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6966-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr 0/12
 Location: WATSONVILLE, CA
 Latitude: 36-57-50.16N NAD 83
 Longitude: 121-45-33.15W
 Heights: 177 feet site elevation (SE)
 85 feet above ground level (AGL)
 262 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6966-OE.

Signature Control No: 201107573-205349644

(DNE)

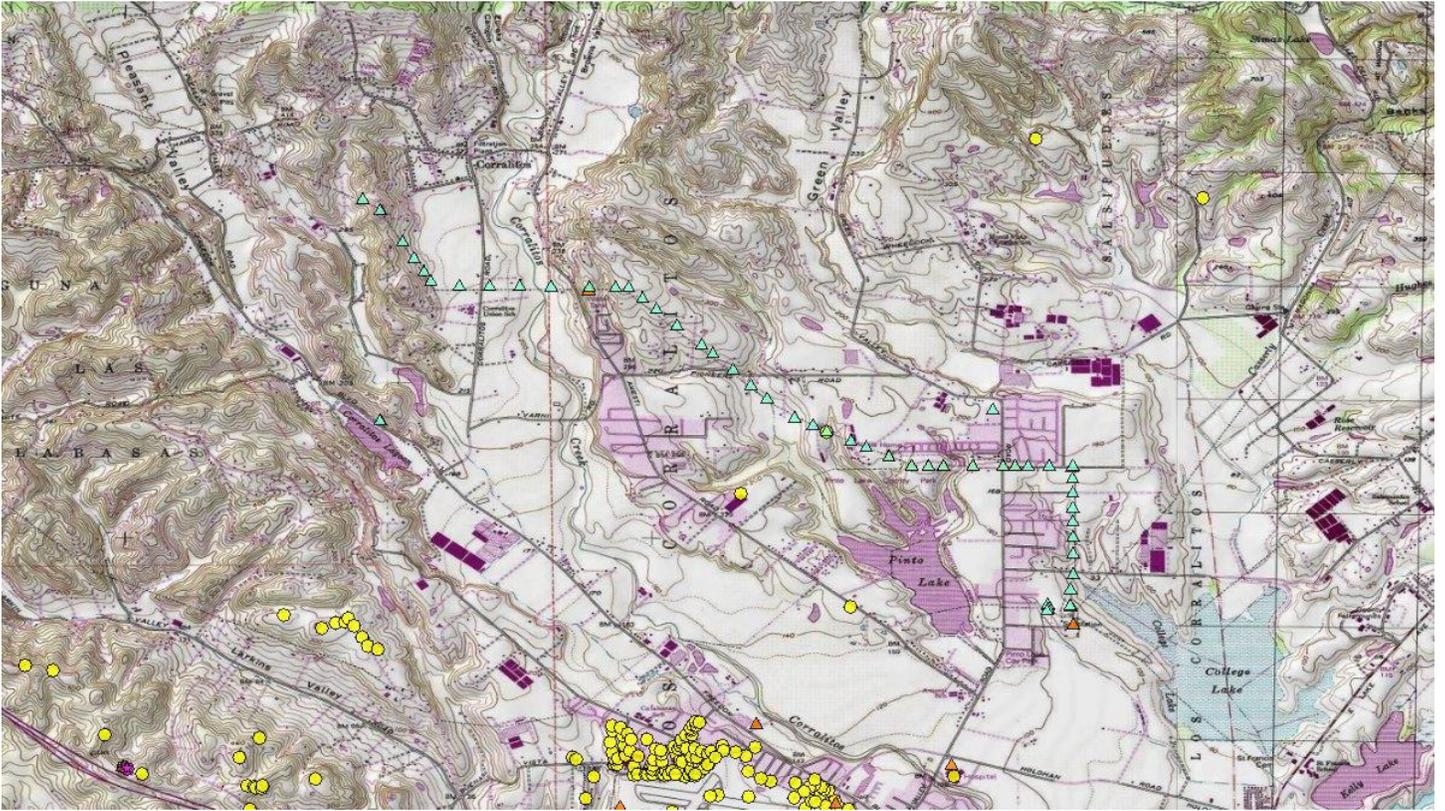
Karen McDonald
Specialist

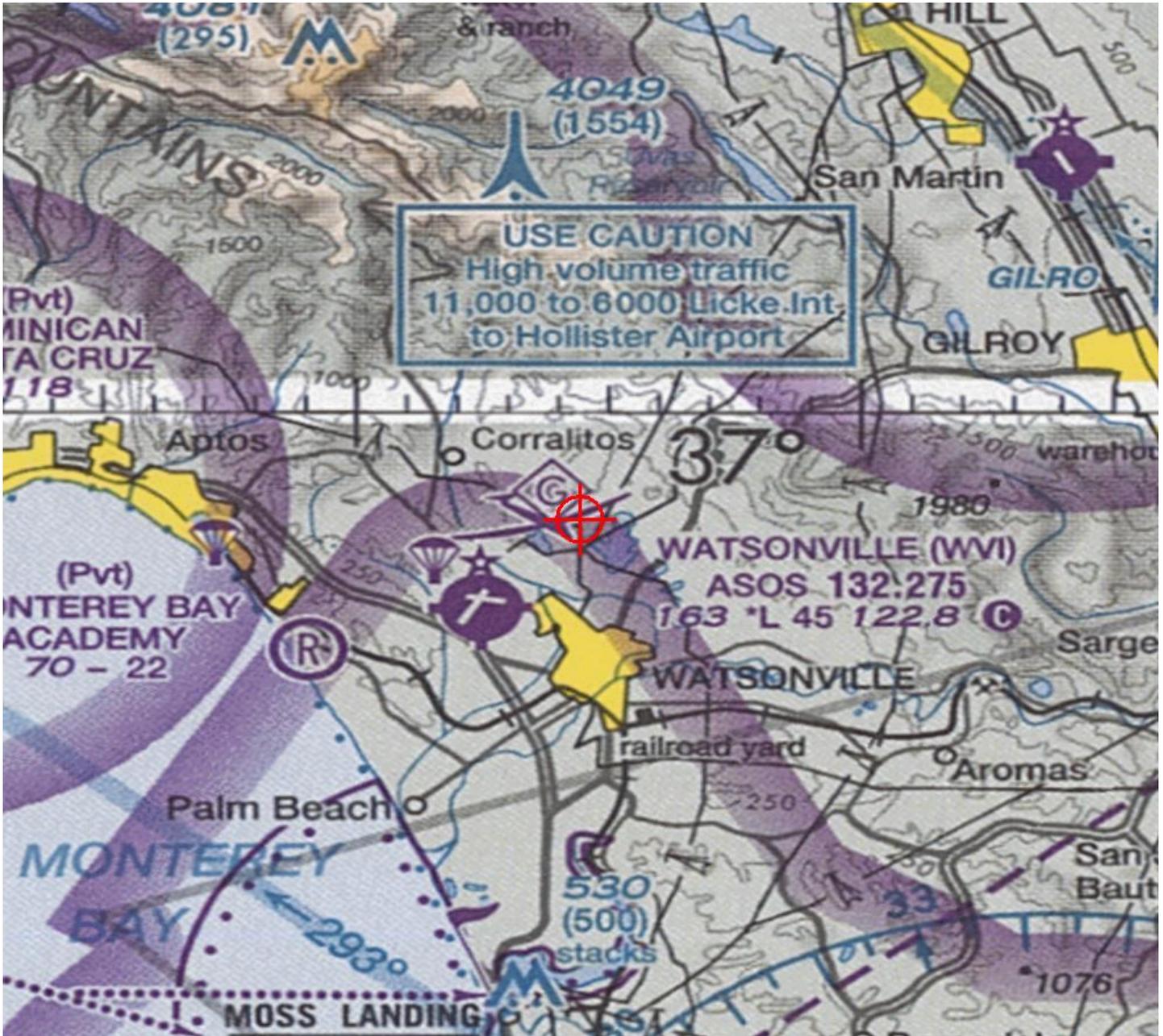
Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6966-OE

PROPOSING TO INSTALL OR REPLACE 15 OF 55 IN A 115 kV REINFORCEMENT PROJECT

Verified Map for ASN 2013-AWP-6966-OE







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6967-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr #2 0/12
 Location: WATSONVILLE, CA
 Latitude: 36-57-49.85N NAD 83
 Longitude: 121-45-33.36W
 Heights: 177 feet site elevation (SE)
 85 feet above ground level (AGL)
 262 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6967-OE.

Signature Control No: 201107574-205349645

(DNE)

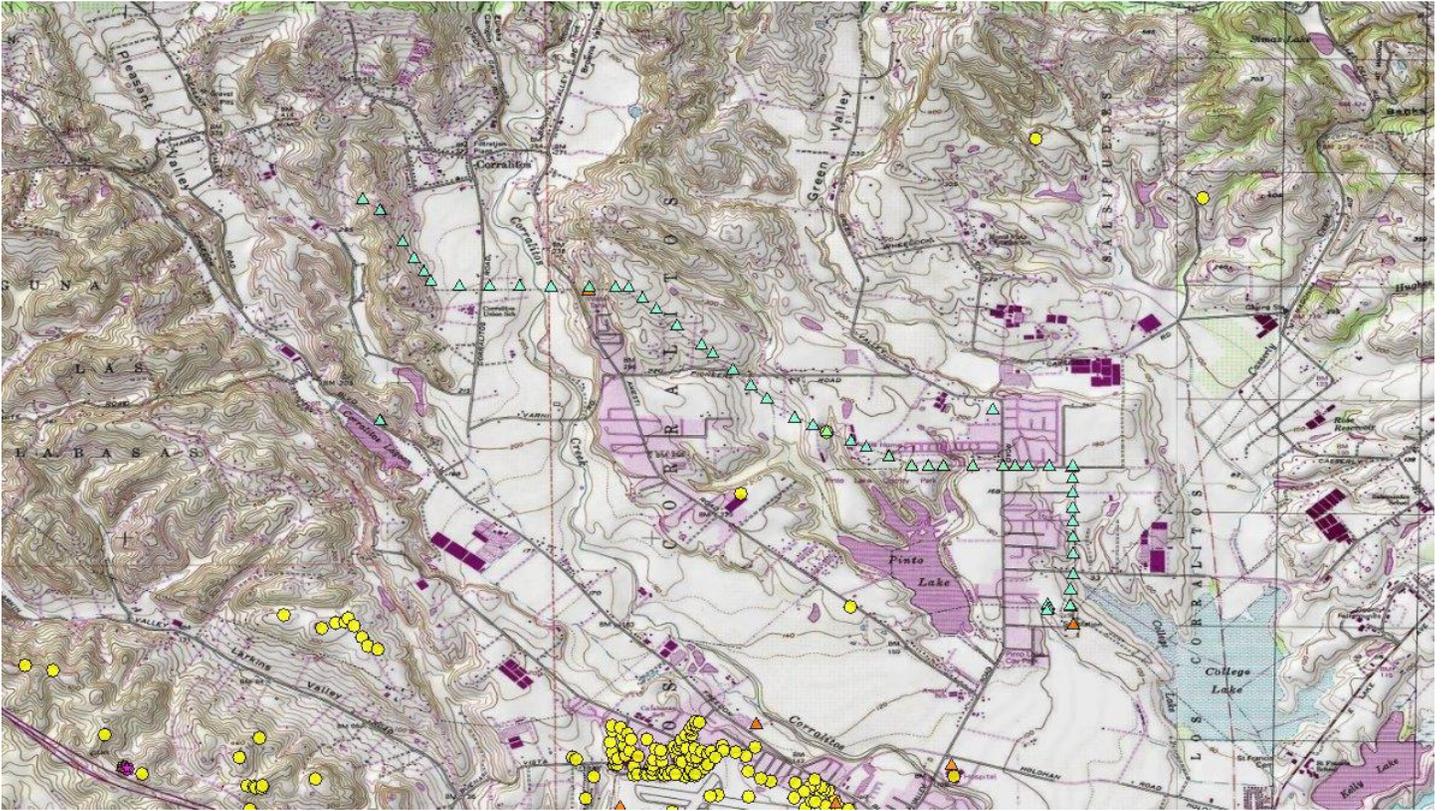
Karen McDonald
Specialist

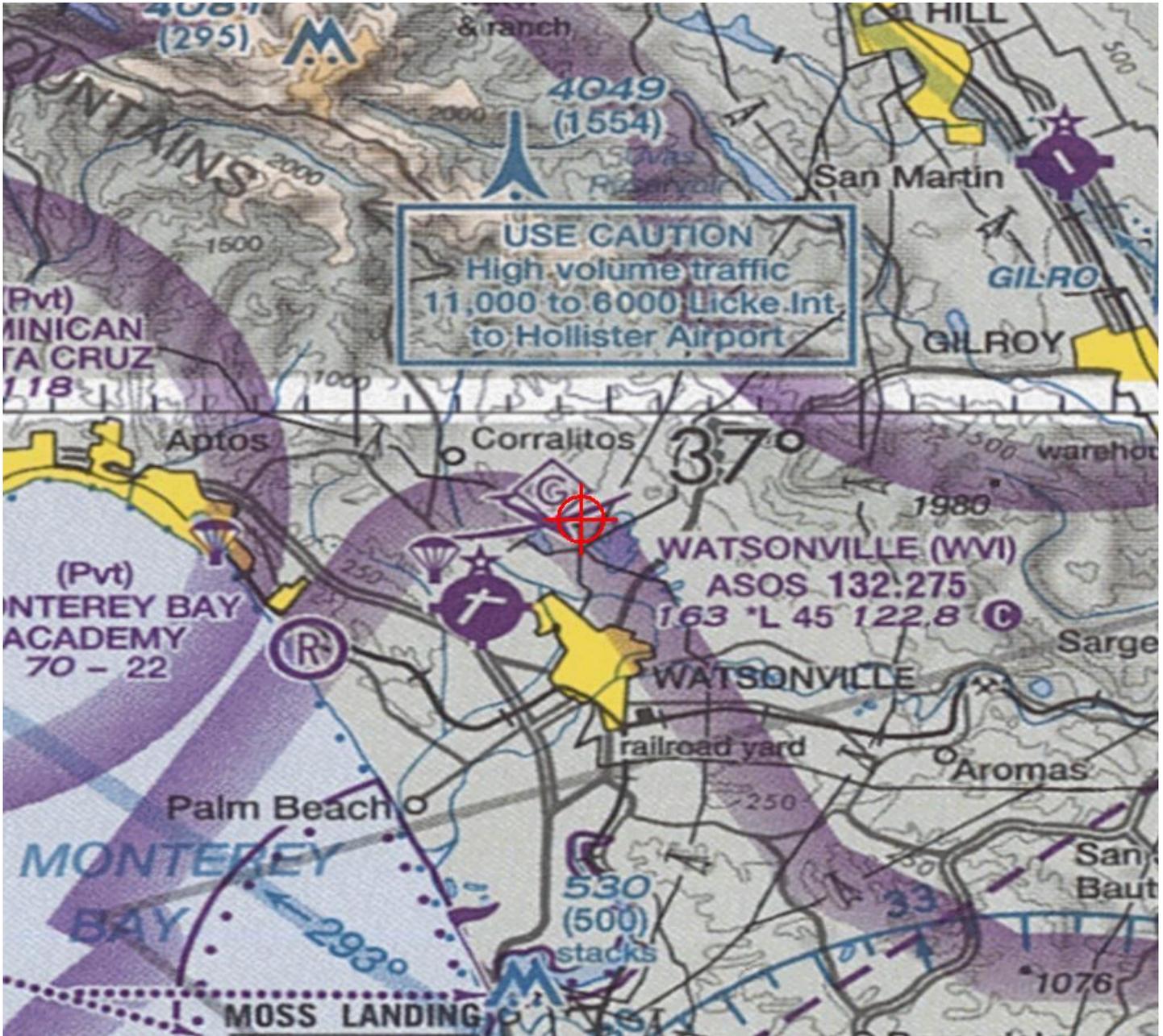
Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6967-OE

PROPOSING TO INSTALL OR REPLACE 16 OF 55 IN A 115 kV REINFORCEMENT PROJECT

Verified Map for ASN 2013-AWP-6967-OE







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6968-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr 1/13
 Location: WATSONVILLE, CA
 Latitude: 36-57-50.13N NAD 83
 Longitude: 121-45-39.93W
 Heights: 175 feet site elevation (SE)
 95 feet above ground level (AGL)
 270 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

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Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6968-OE.

Signature Control No: 201107575-205349646

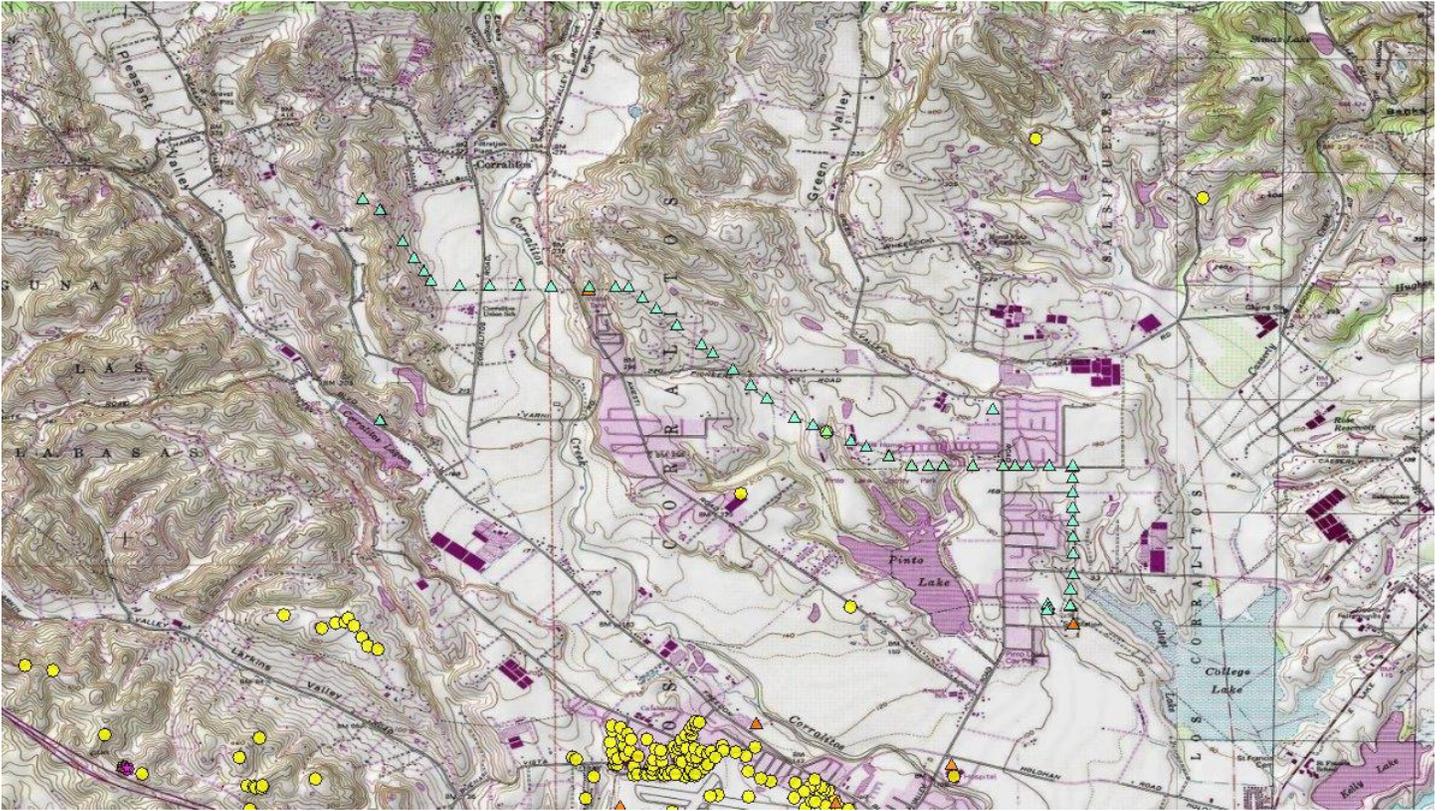
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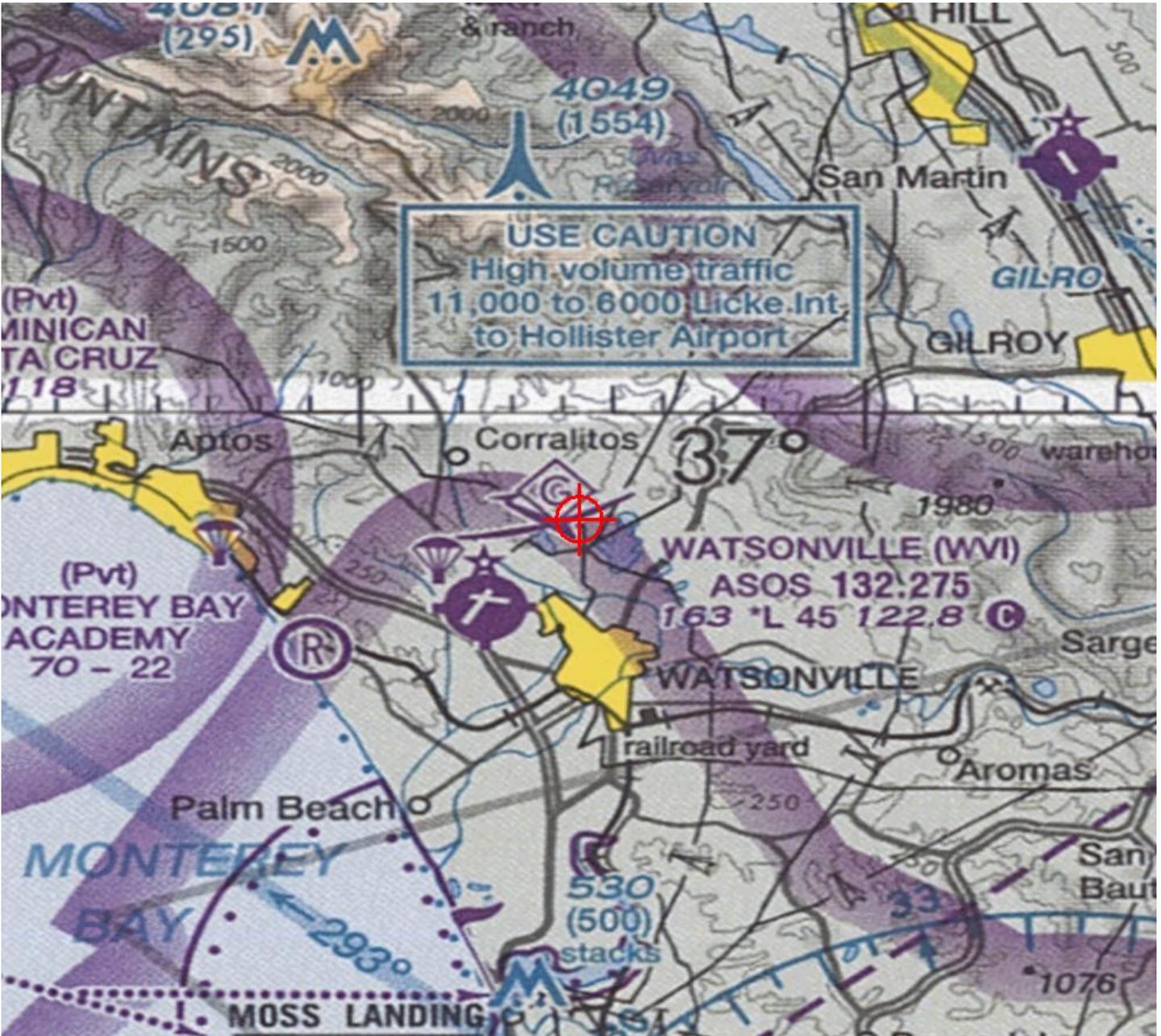
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6968-OE

PROPOSING TO INSTALL OR REPLACE 17 OF 55 IN A 115 kV REINFORCEMENT PROJECT







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6968-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Utility Pole Tx Twr 1/13
Location:	WATSONVILLE, CA
Latitude:	36-57-50.13N NAD 83
Longitude:	121-45-39.93W
Heights:	175 feet site elevation (SE) 95 feet above ground level (AGL) 270 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6968-OE.

Signature Control No: 201107575-205349646

(DNE)

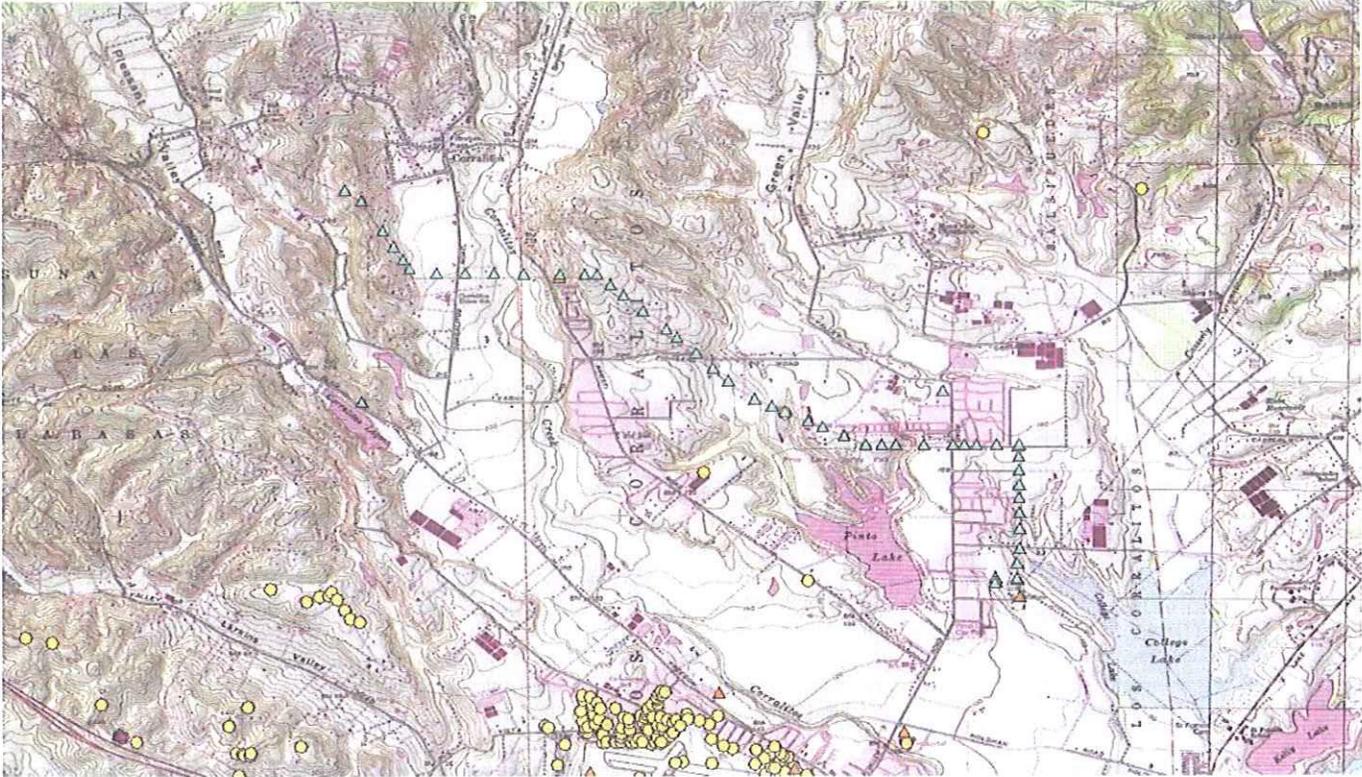
Karen McDonald
Specialist

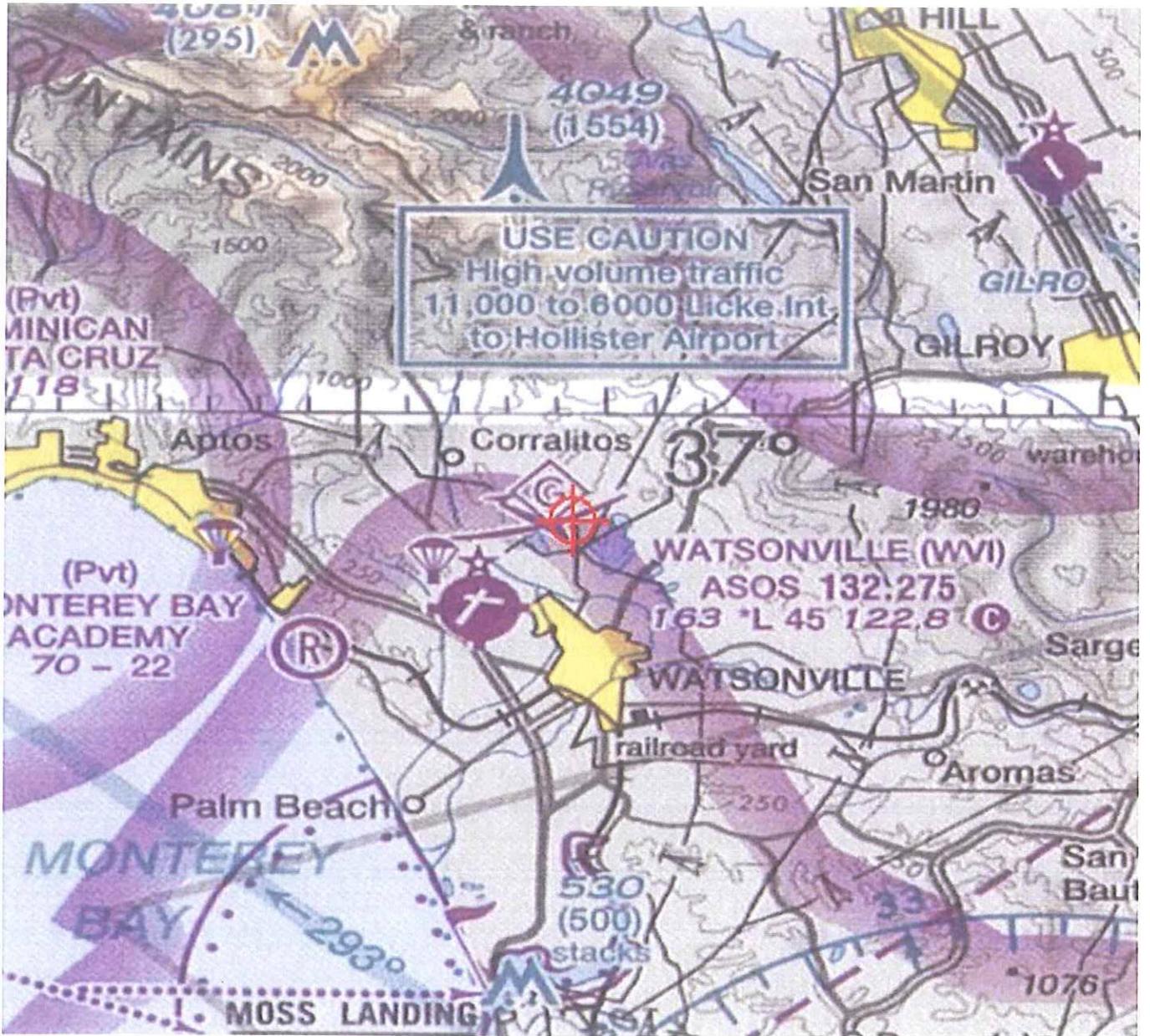
Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6968-OE

PROPOSING TO INSTALL OR REPLACE 17 OF 55 IN A 115 kV REINFORCEMENT PROJECT

Verified Map for ASN 2013-AWP-6968-OE







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6969-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr 1/14
 Location: WATSONVILLE, CA
 Latitude: 36-57-50.11N NAD 83
 Longitude: 121-45-45.94W
 Heights: 174 feet site elevation (SE)
 95 feet above ground level (AGL)
 269 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6969-OE.

Signature Control No: 201107576-205349647

(DNE)

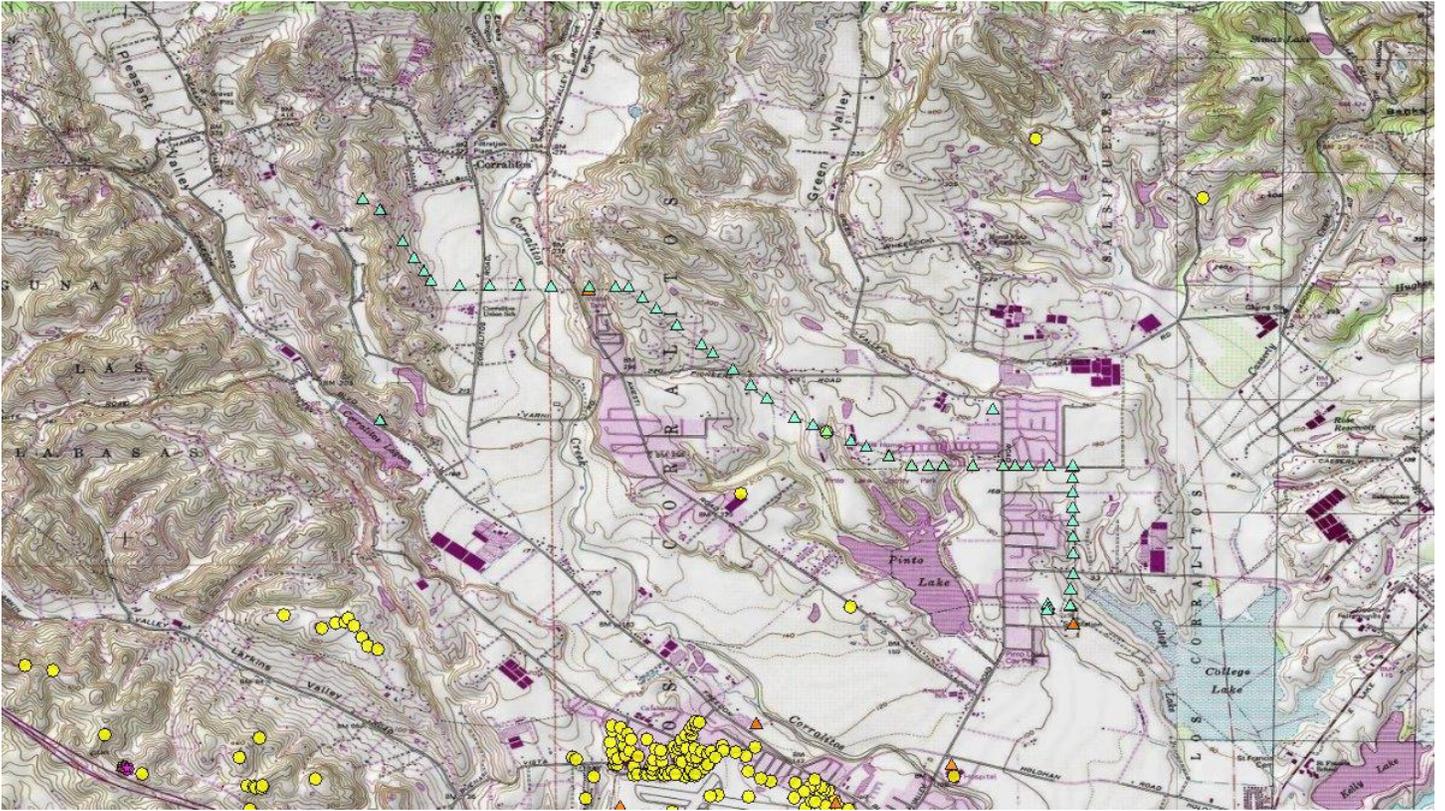
Karen McDonald
Specialist

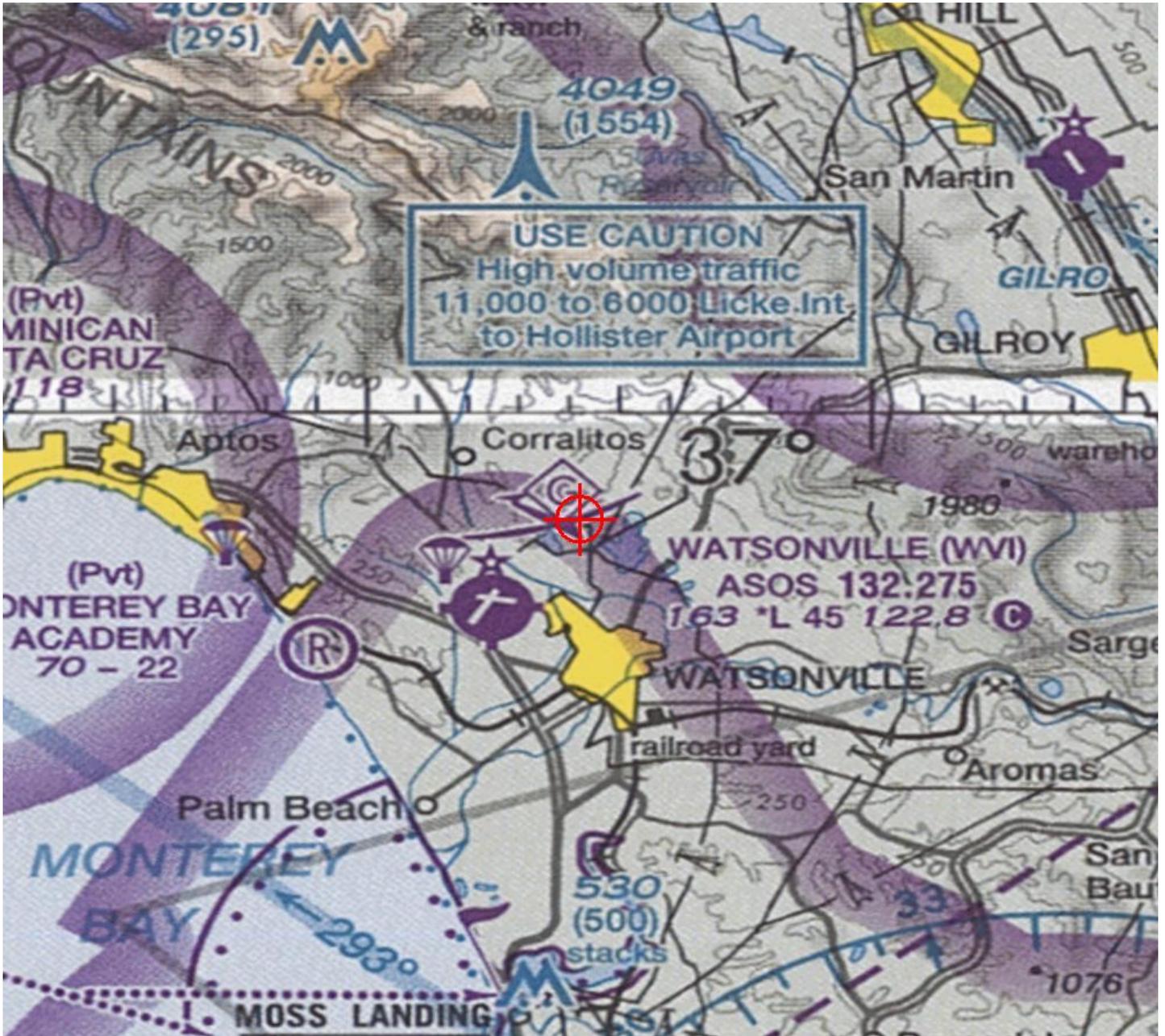
Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6969-OE

PROPOSING TO INSTALL OR REPLACE 18 OF 55 IN A 115 kV REINFORCEMENT PROJECT

Verified Map for ASN 2013-AWP-6969-OE







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6970-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr 2/25
 Location: WATSONVILLE, CA
 Latitude: 36-58-01.71N NAD 83
 Longitude: 121-46-47.40W
 Heights: 207 feet site elevation (SE)
 80 feet above ground level (AGL)
 287 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6970-OE.

Signature Control No: 201107577-205349648

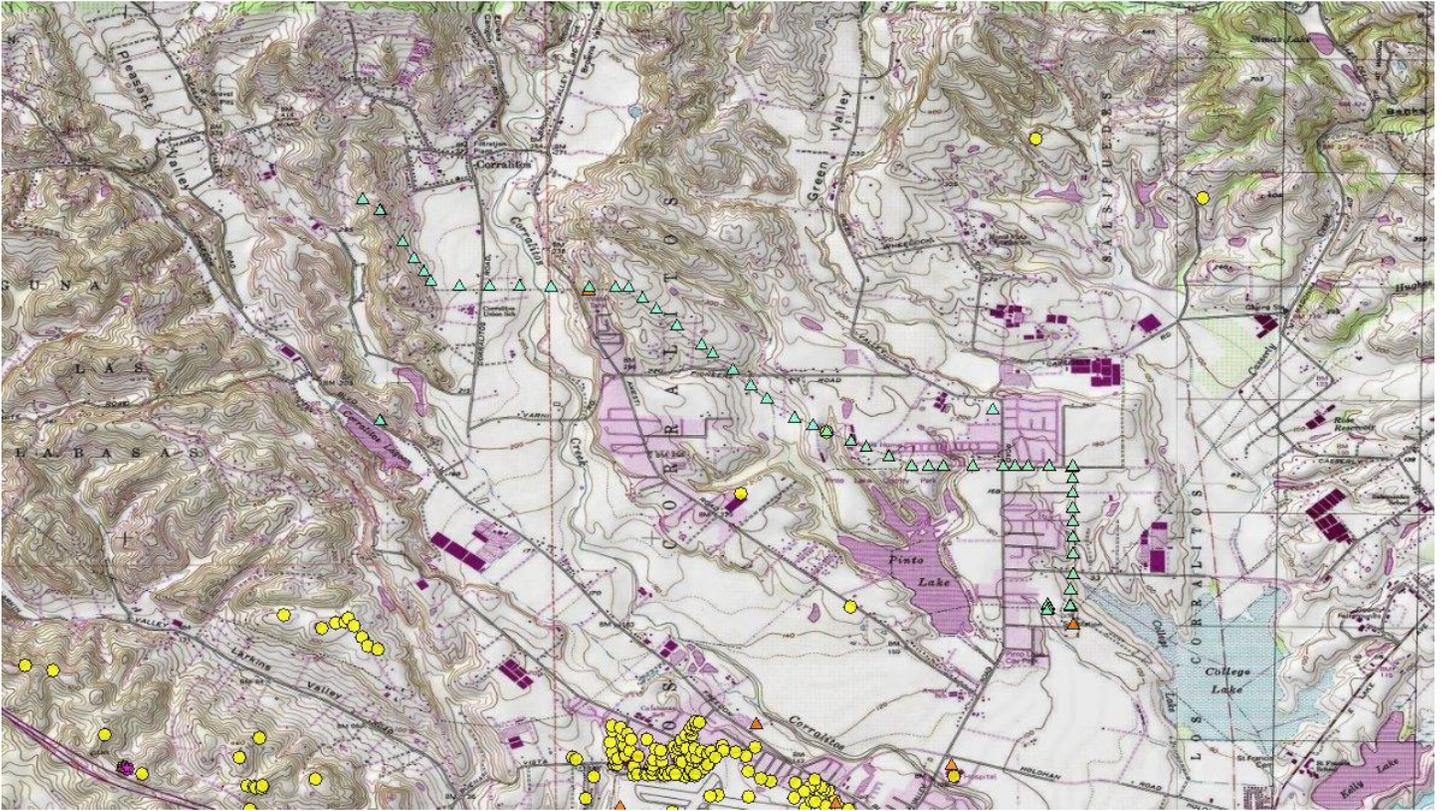
(DNE)

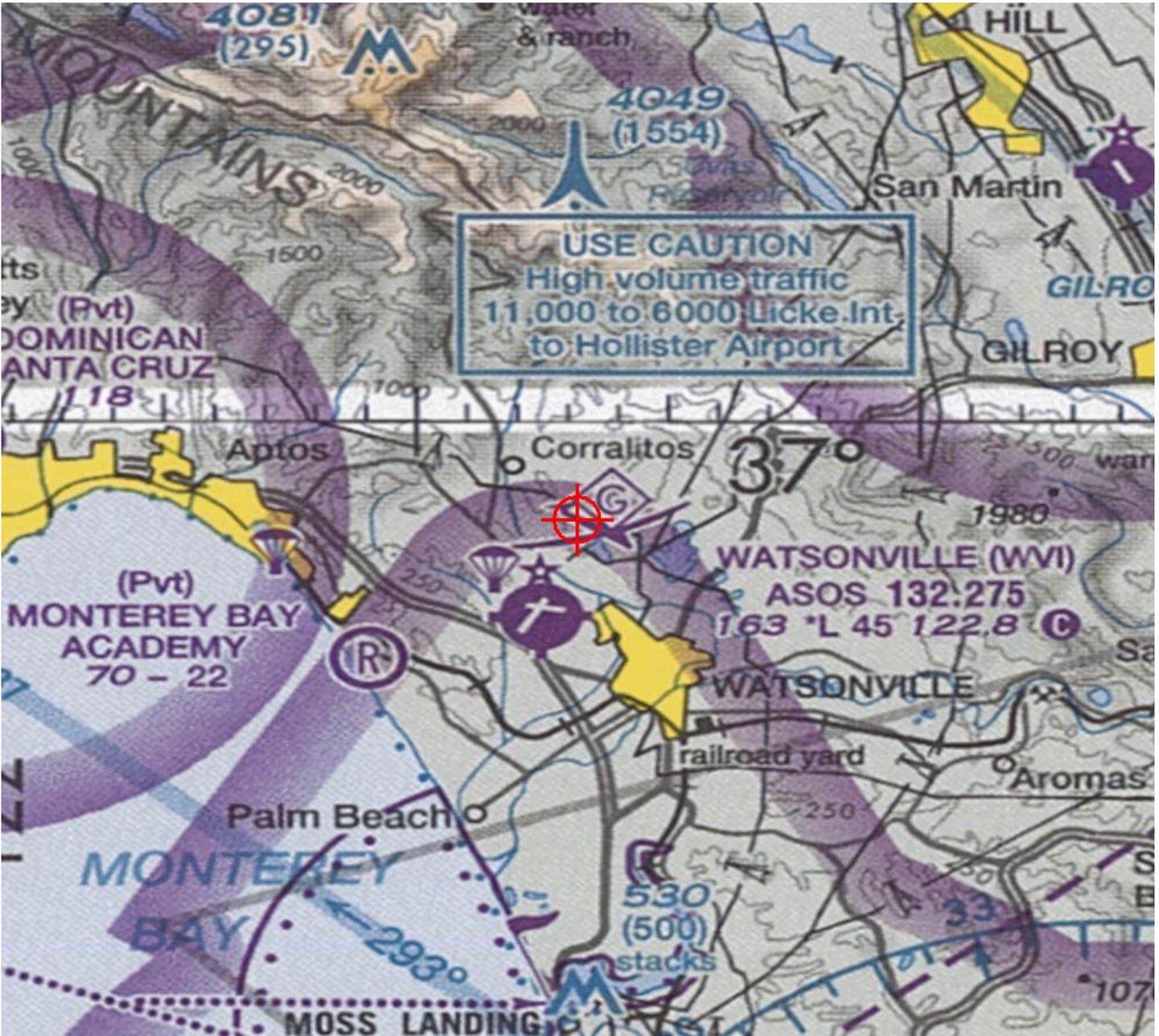
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6970-OE

PROPOSEING TO INSTALL 29 OF 55 POLES FOR 115 kV REINFORCEMENT PROJECT







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6971-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr2/26
 Location: WATSONVILLE, CA
 Latitude: 36-58-03.89N NAD 83
 Longitude: 121-46-52.65W
 Heights: 151 feet site elevation (SE)
 82 feet above ground level (AGL)
 233 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6971-OE.

Signature Control No: 201107578-205349649

(DNE)

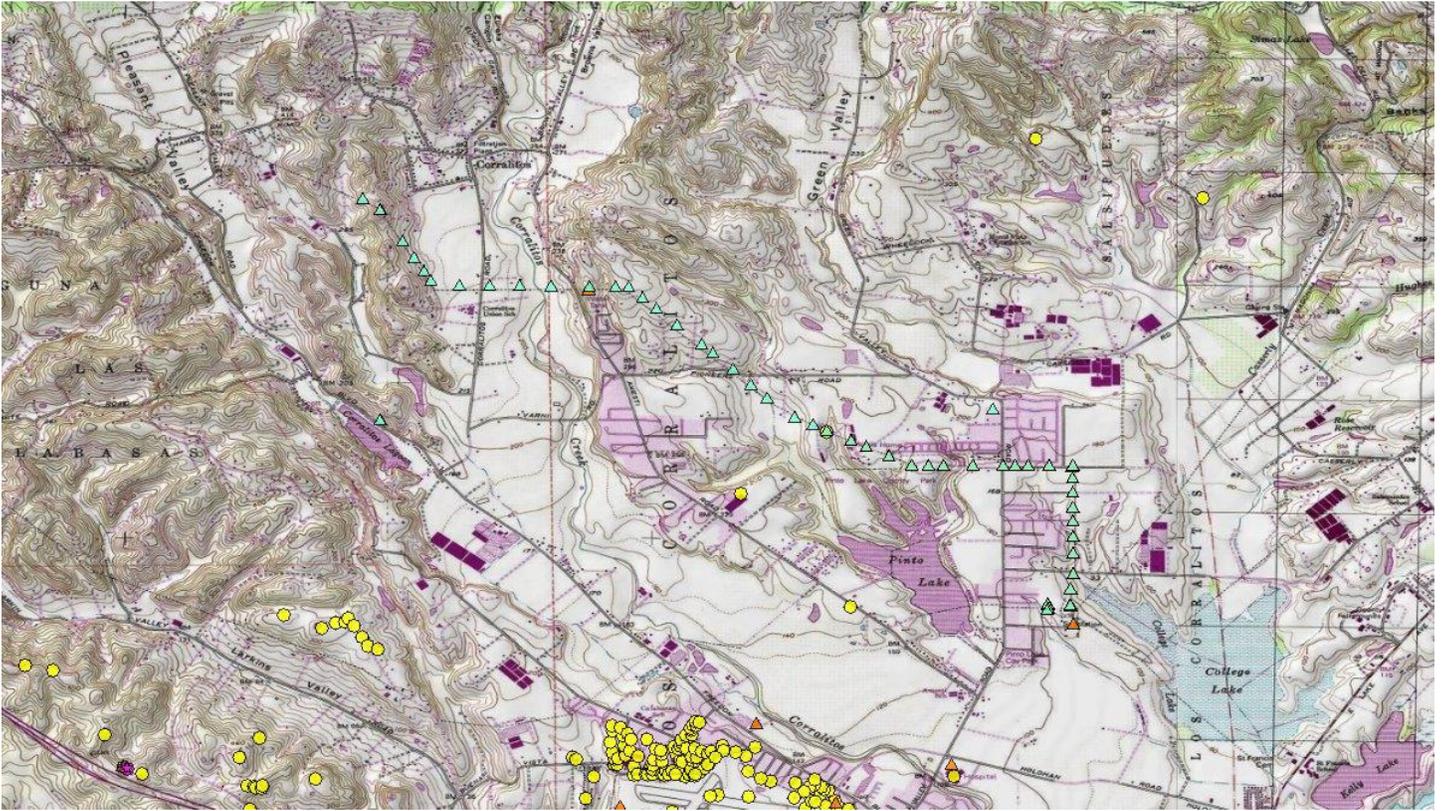
Karen McDonald
Specialist

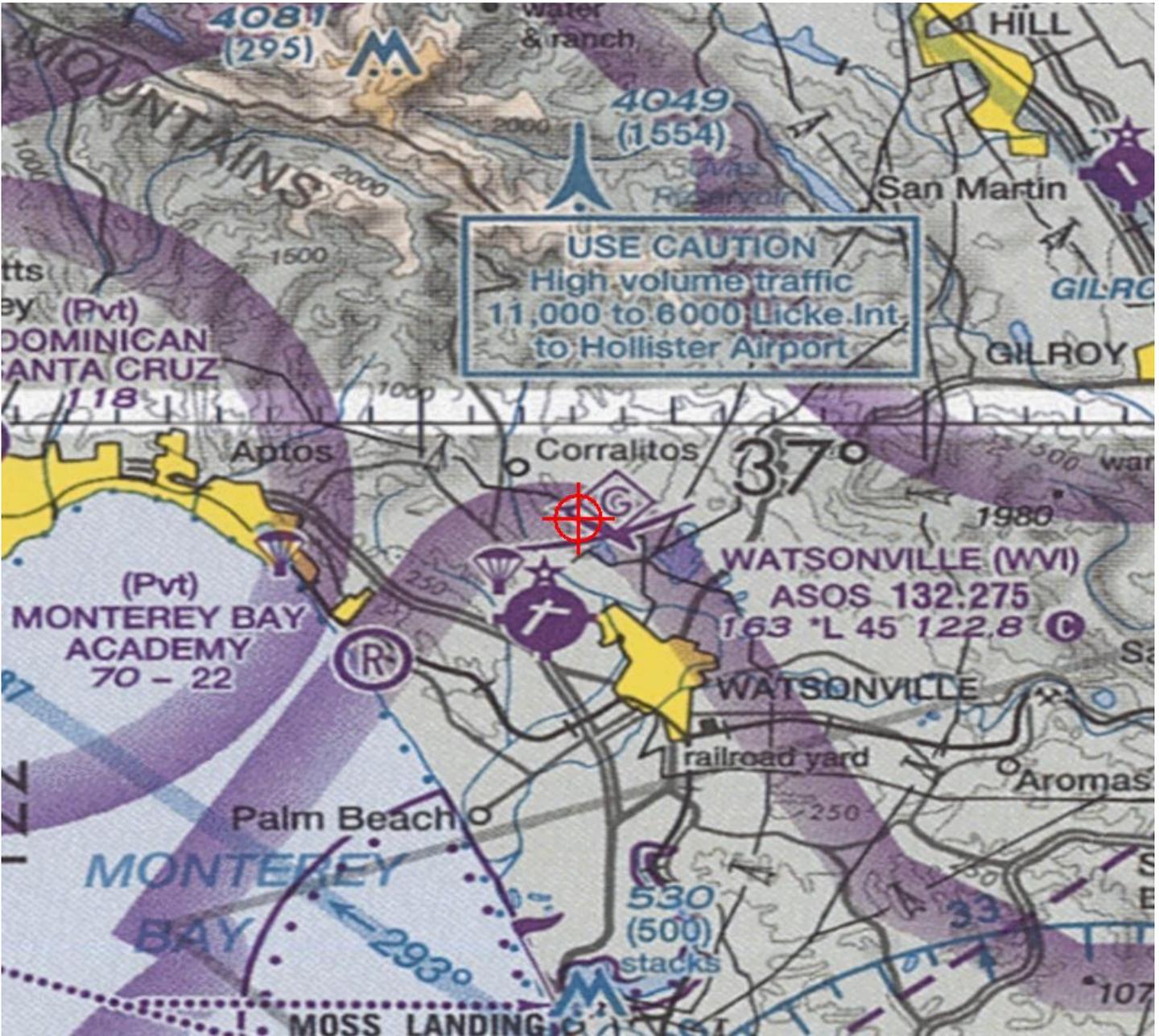
Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6971-OE

PROPOSEING TO INSTALL 30 OF 55 POLES FOR 115 kV REINFORCEMENT PROJECT

Verified Map for ASN 2013-AWP-6971-OE







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6972-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr 2/27
 Location: WATSONVILLE, CA
 Latitude: 36-58-06.20N NAD 83
 Longitude: 121-45-56.00W
 Heights: 143 feet site elevation (SE)
 90 feet above ground level (AGL)
 233 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6972-OE.

Signature Control No: 201107579-205349651

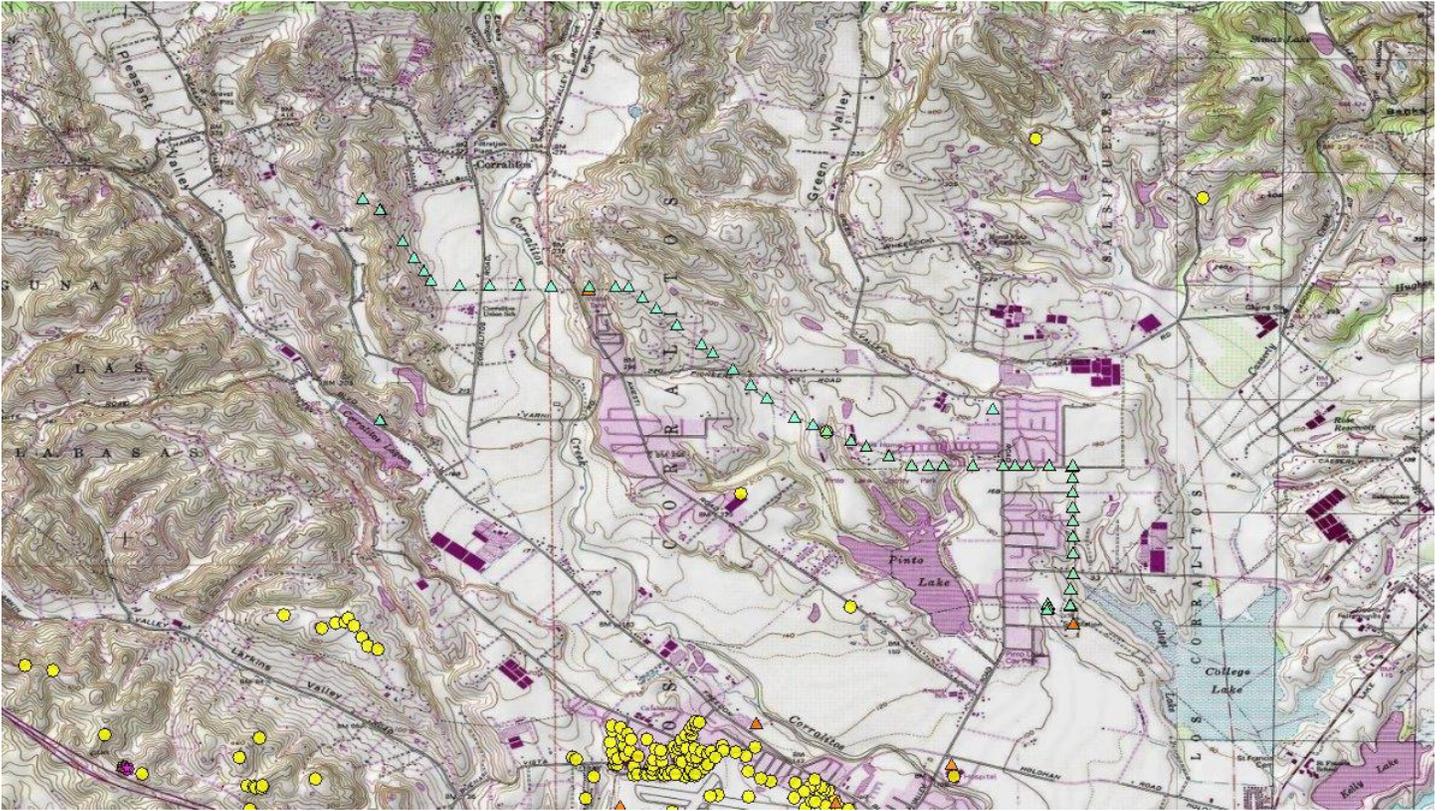
(DNE)

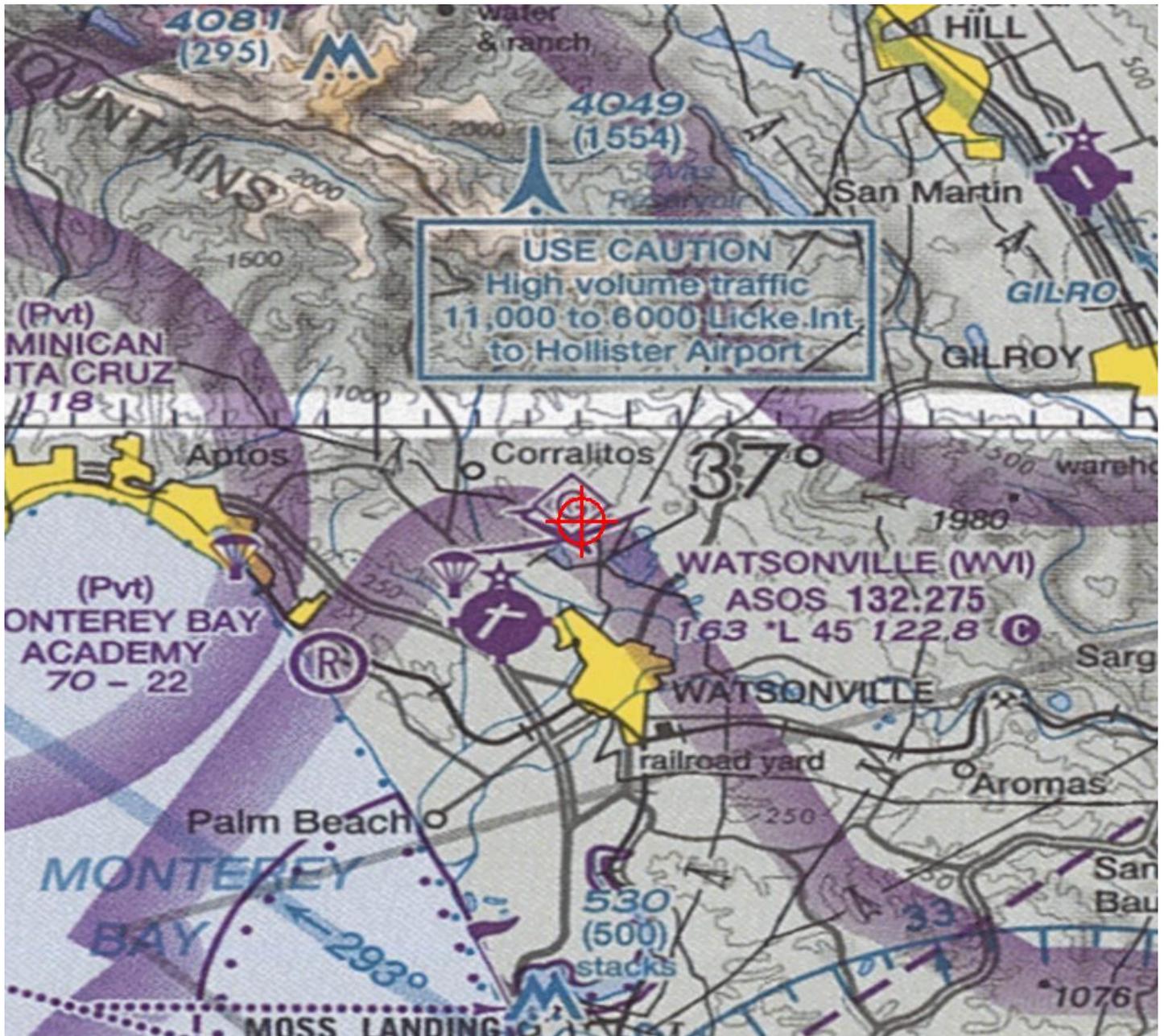
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6972-OE

PROPOSEING TO INSTALL 31 OF 55 POLES FOR 115 kV REINFORCEMENT PROJECT







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6973-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr 2/28
 Location: WATSONVILLE, CA
 Latitude: 36-58-09.32N NAD 83
 Longitude: 121-47-00.51W
 Heights: 148 feet site elevation (SE)
 90 feet above ground level (AGL)
 238 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6973-OE.

Signature Control No: 201107580-205349652

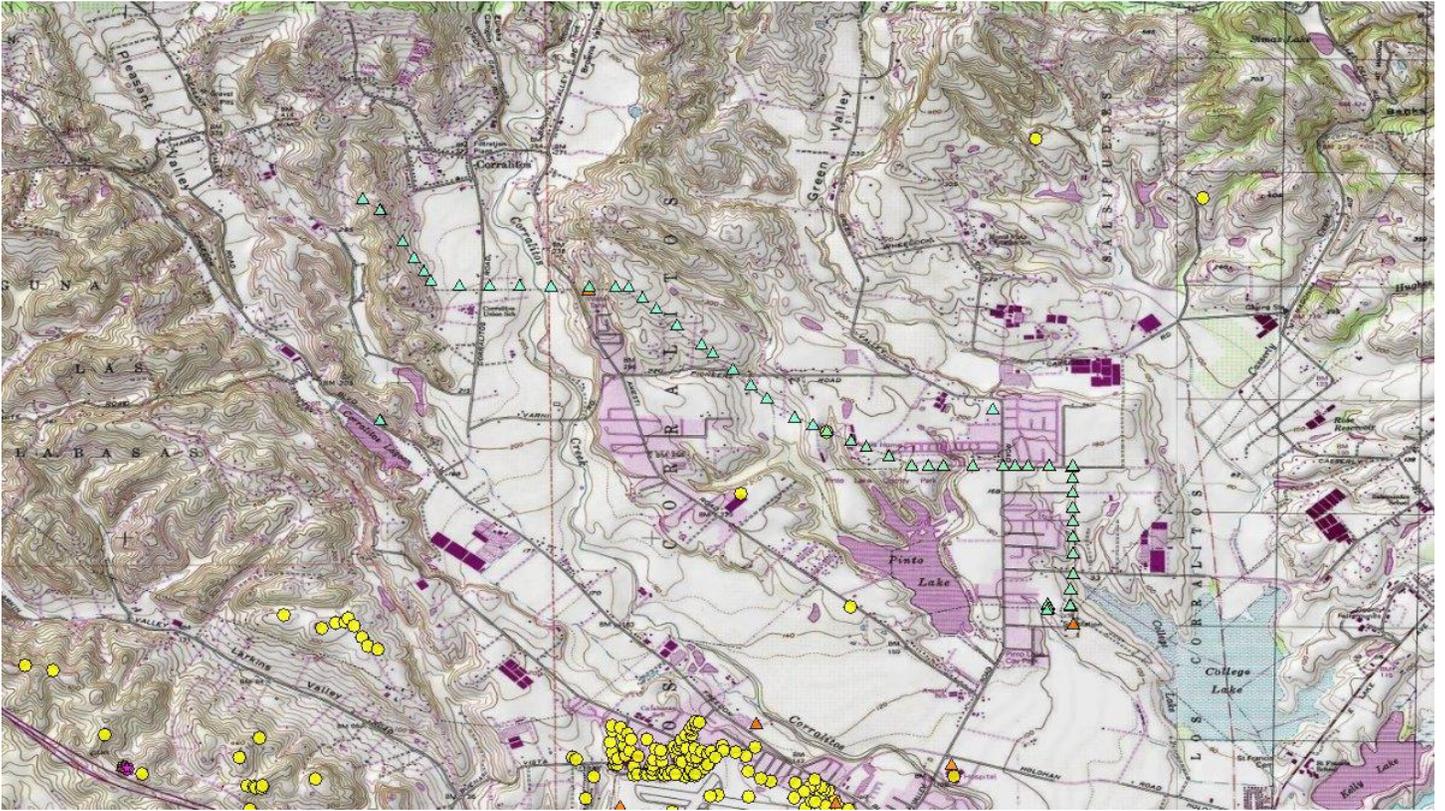
(DNE)

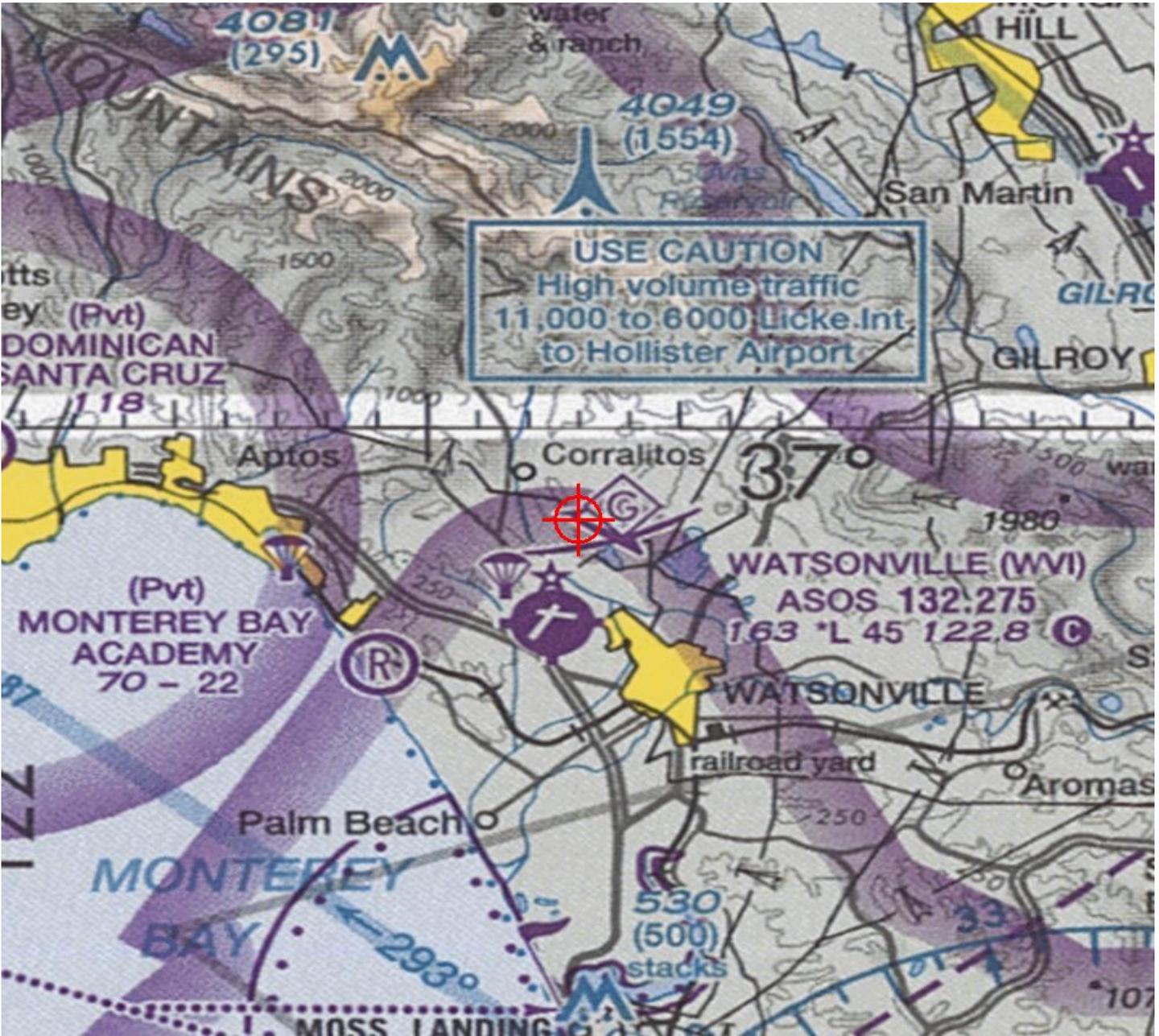
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6973-OE

PROPOSEING TO INSTALL 32 OF 55 POLES FOR 115 kV REINFORCEMENT PROJECT







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6974-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr 2/29
 Location: WATSONVILLE, CA
 Latitude: 36-58-13.13N NAD 83
 Longitude: 121-47-05.13W
 Heights: 157 feet site elevation (SE)
 90 feet above ground level (AGL)
 247 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6974-OE.

Signature Control No: 201107581-205349653

(DNE)

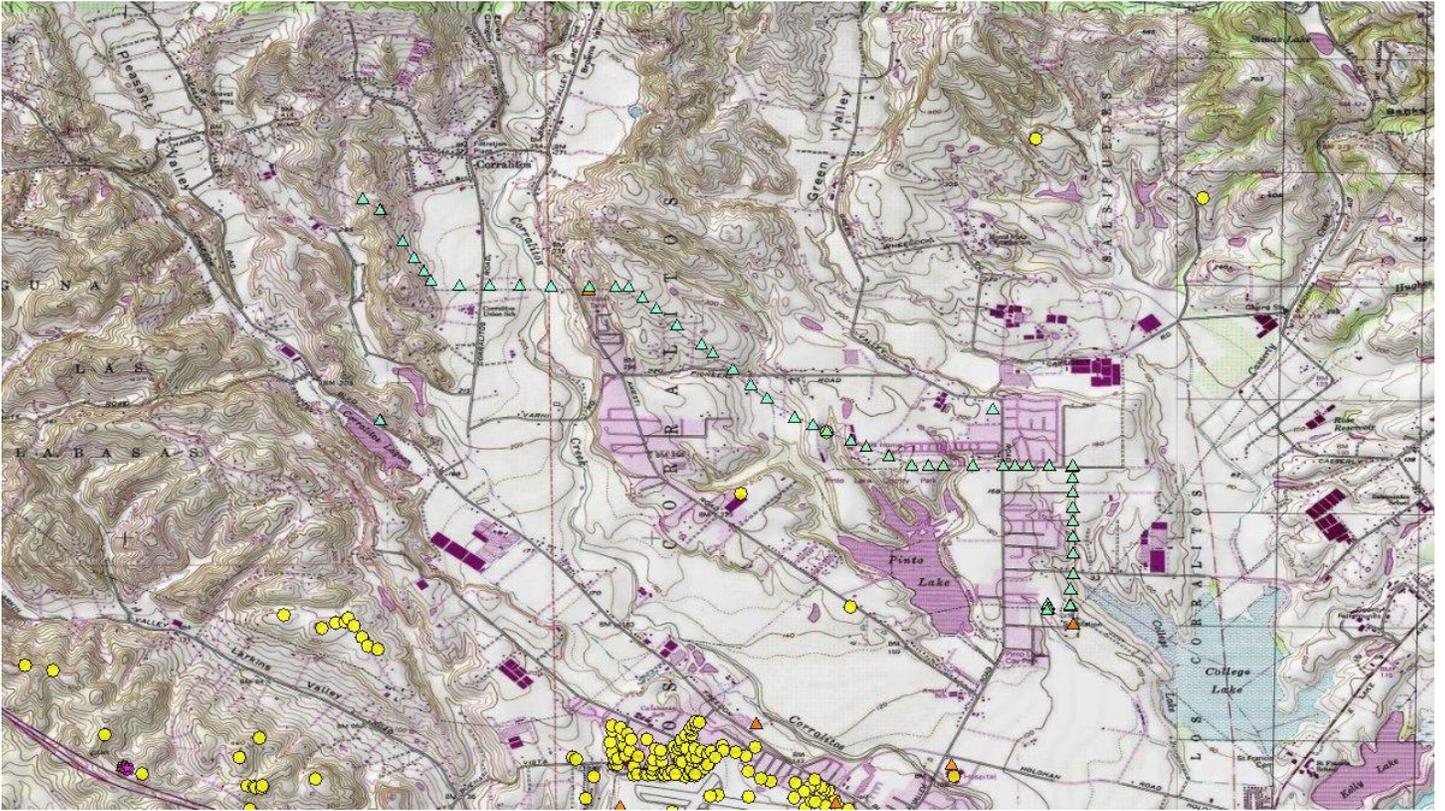
Karen McDonald
Specialist

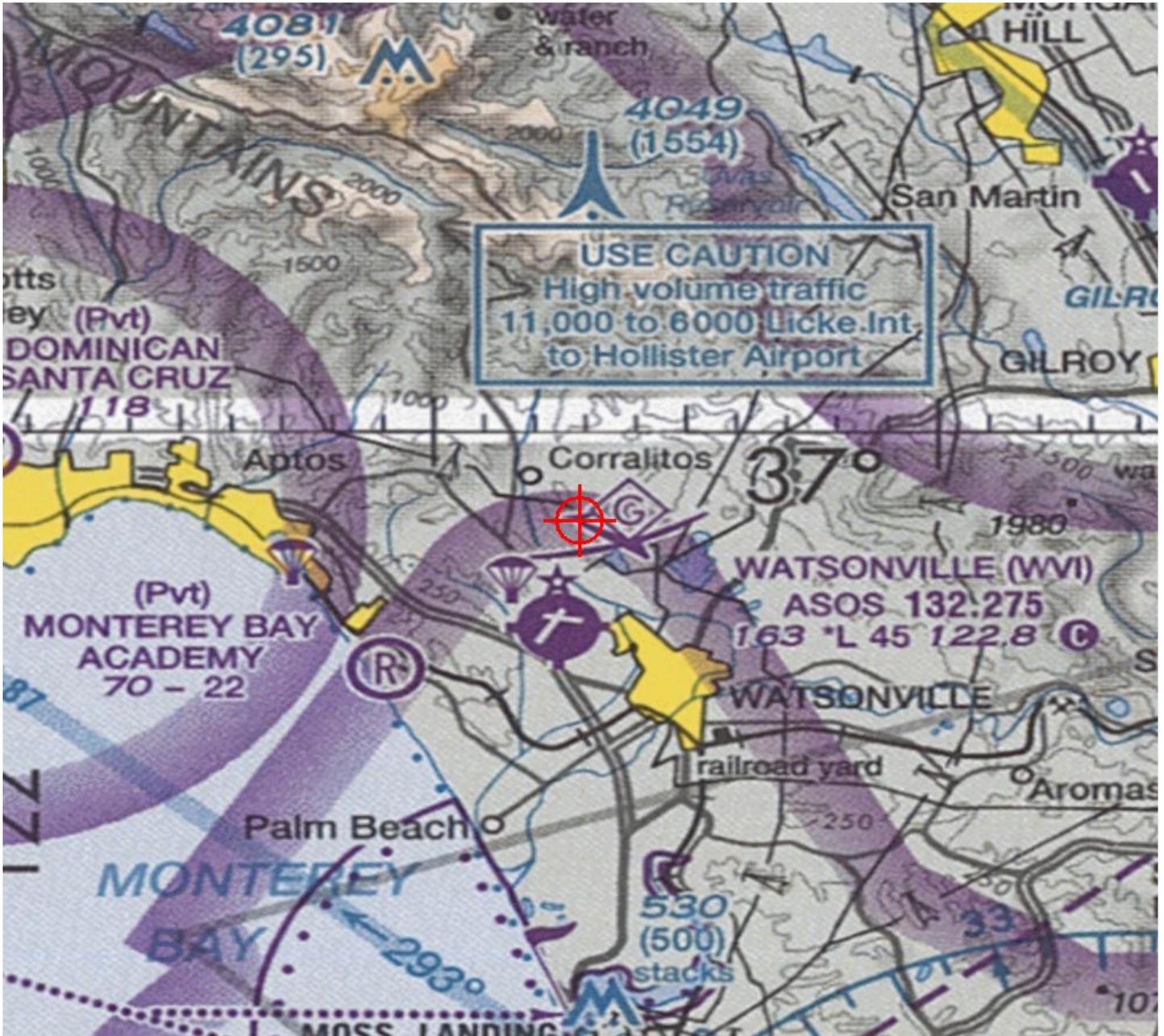
Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6974-OE

PROPOSEING TO INSTALL 33 OF 55 POLES FOR 115 kV REINFORCEMENT PROJECT

Verified Map for ASN 2013-AWP-6974-OE







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6975-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr 2/30
 Location: WATSONVILLE, CA
 Latitude: 36-58-17.60N NAD 83
 Longitude: 121-47-10.22W
 Heights: 178 feet site elevation (SE)
 90 feet above ground level (AGL)
 268 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6975-OE.

Signature Control No: 201107582-205349654

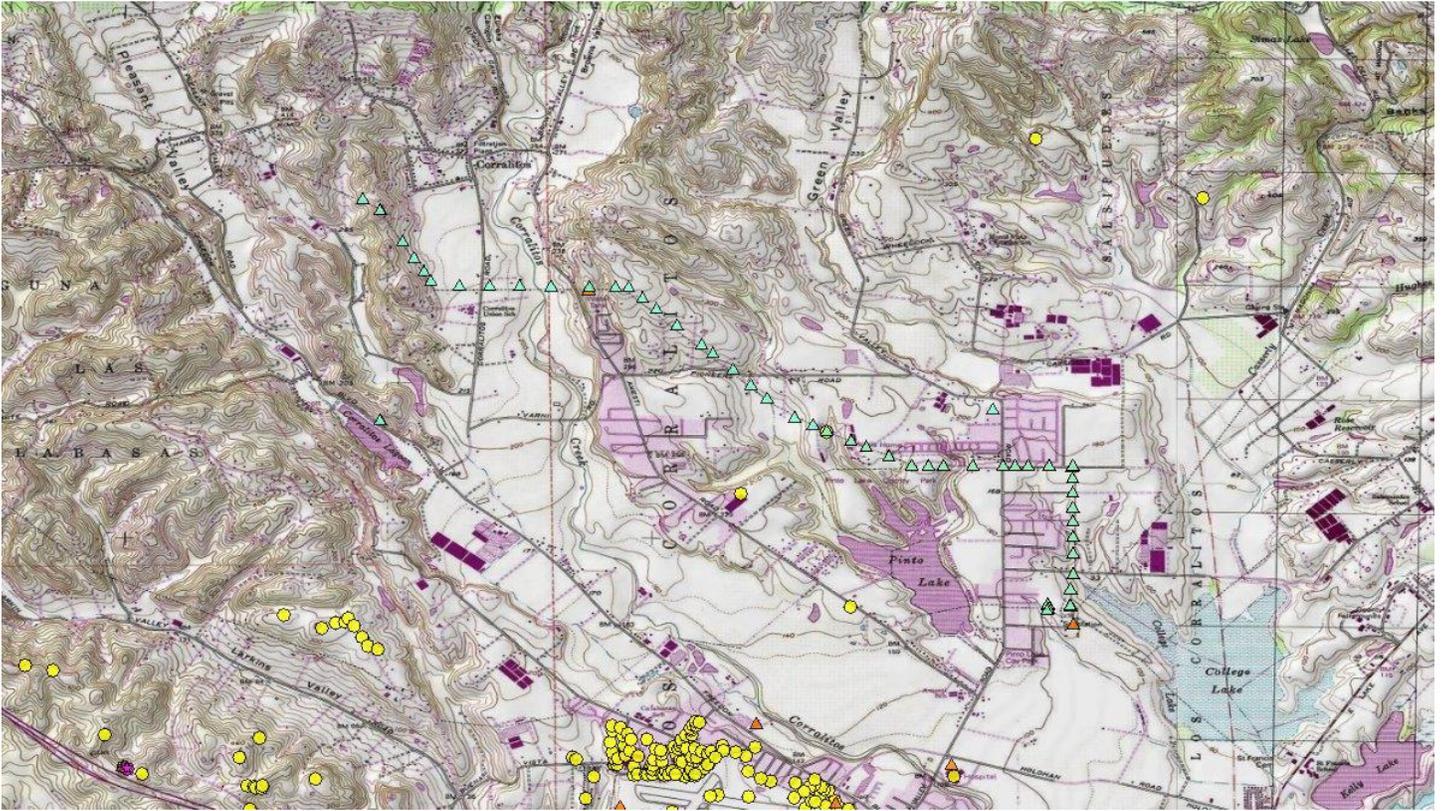
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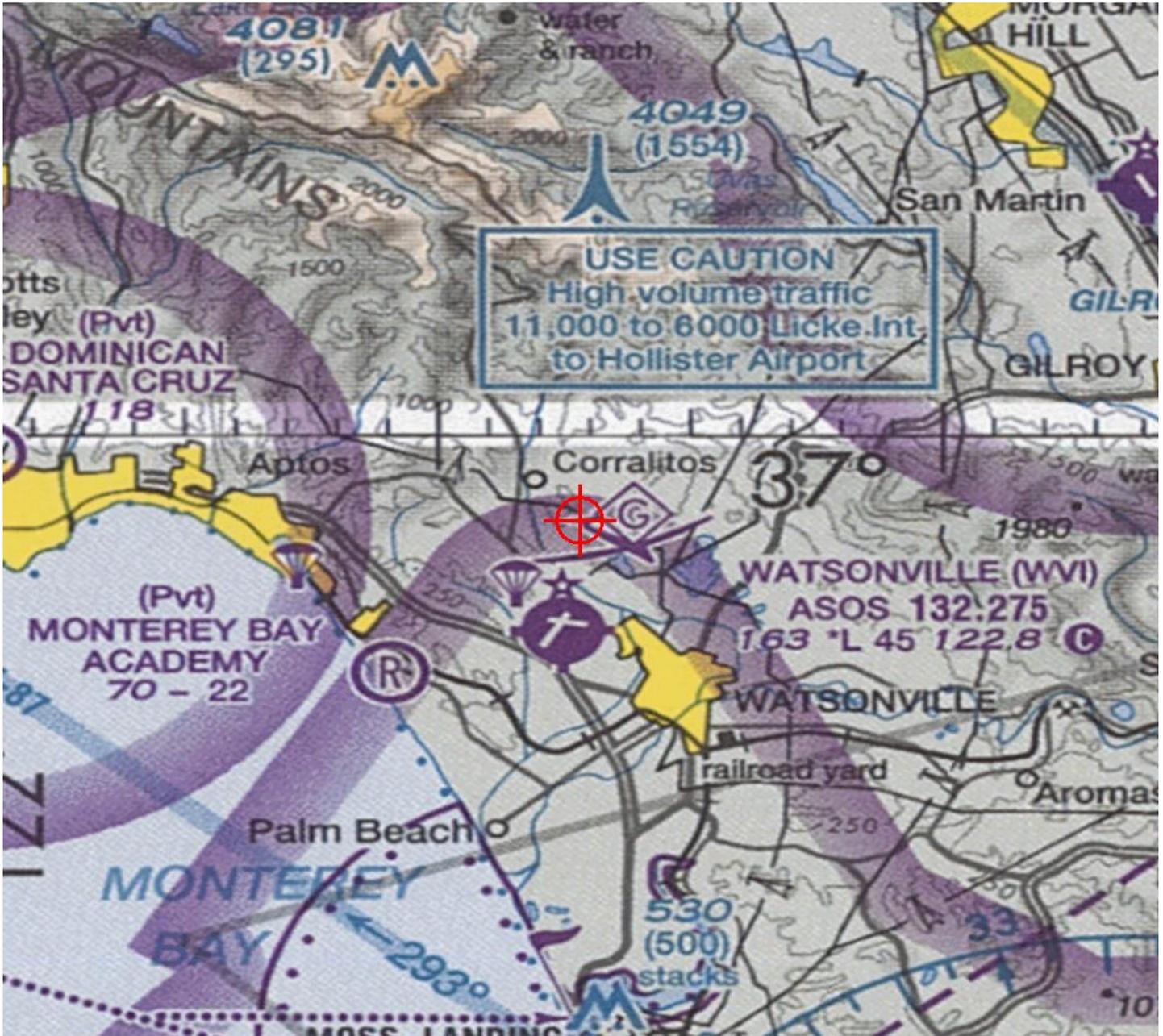
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6975-OE

PROPOSEING TO INSTALL 34 OF 55 POLES FOR 115 kV REINFORCEMENT PROJECT







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6976-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr 2/31
 Location: WATSONVILLE, CA
 Latitude: 36-58-22.16N NAD 83
 Longitude: 121-47-16.02W
 Heights: 233 feet site elevation (SE)
 95 feet above ground level (AGL)
 328 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6976-OE.

Signature Control No: 201107583-205349655

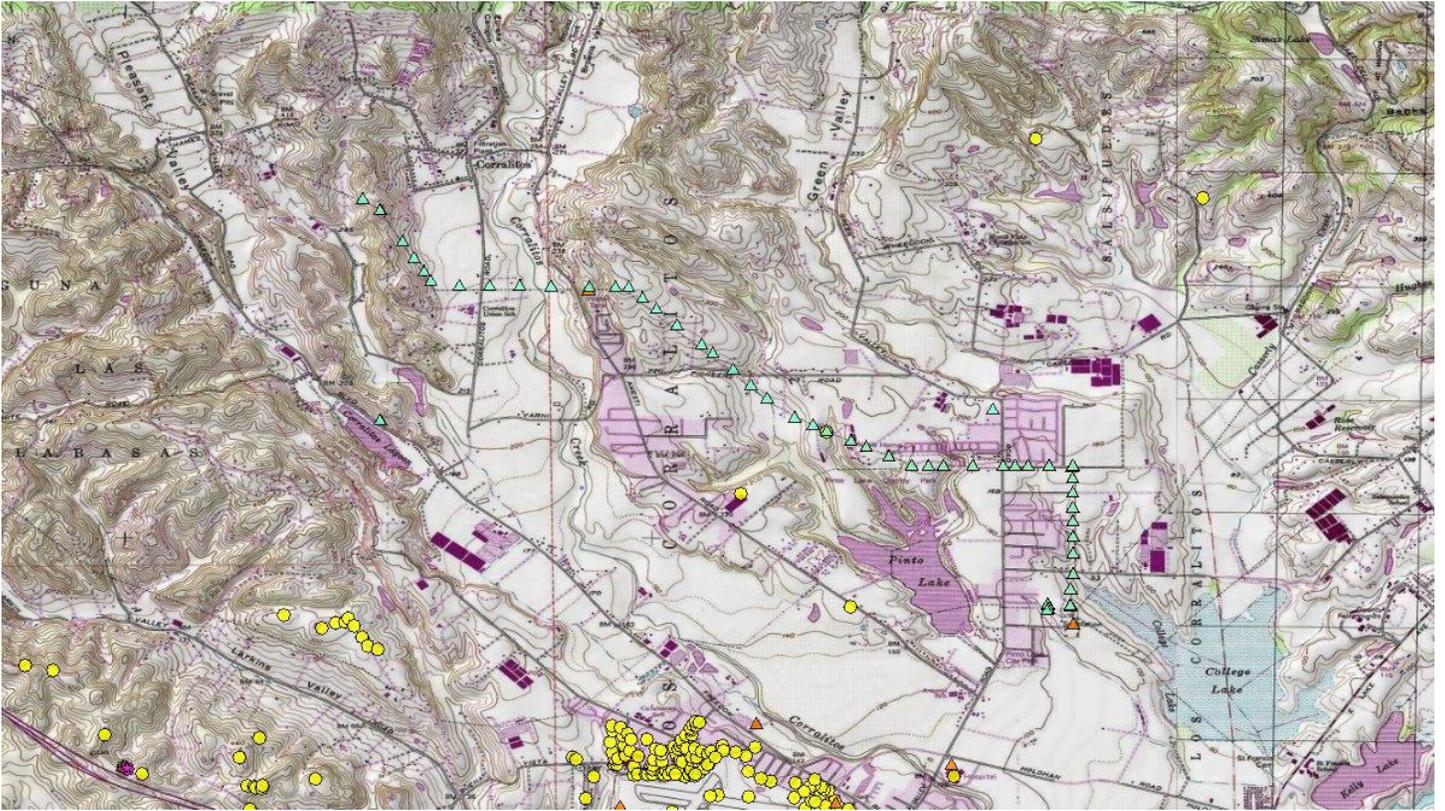
(DNE)

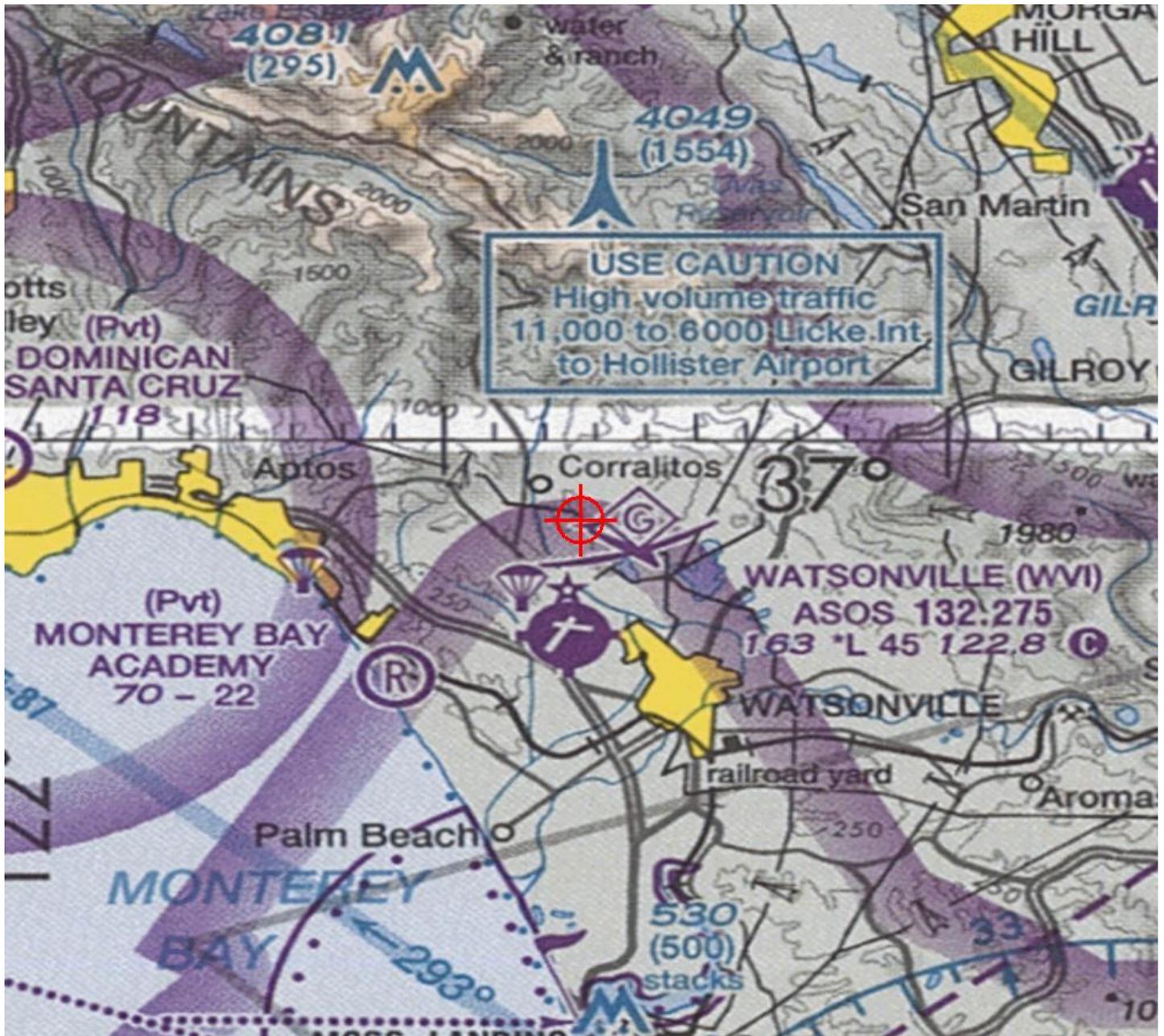
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6976-OE

PROPOSEING TO INSTALL 35 OF 55 POLES FOR 115 kV REINFORCEMENT PROJECT







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6977-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr 2/32
 Location: WATSONVILLE, CA
 Latitude: 36-58-24.68N NAD 83
 Longitude: 121-47-19.22W
 Heights: 257 feet site elevation (SE)
 100 feet above ground level (AGL)
 357 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6977-OE.

Signature Control No: 201107584-205349656

(DNE)

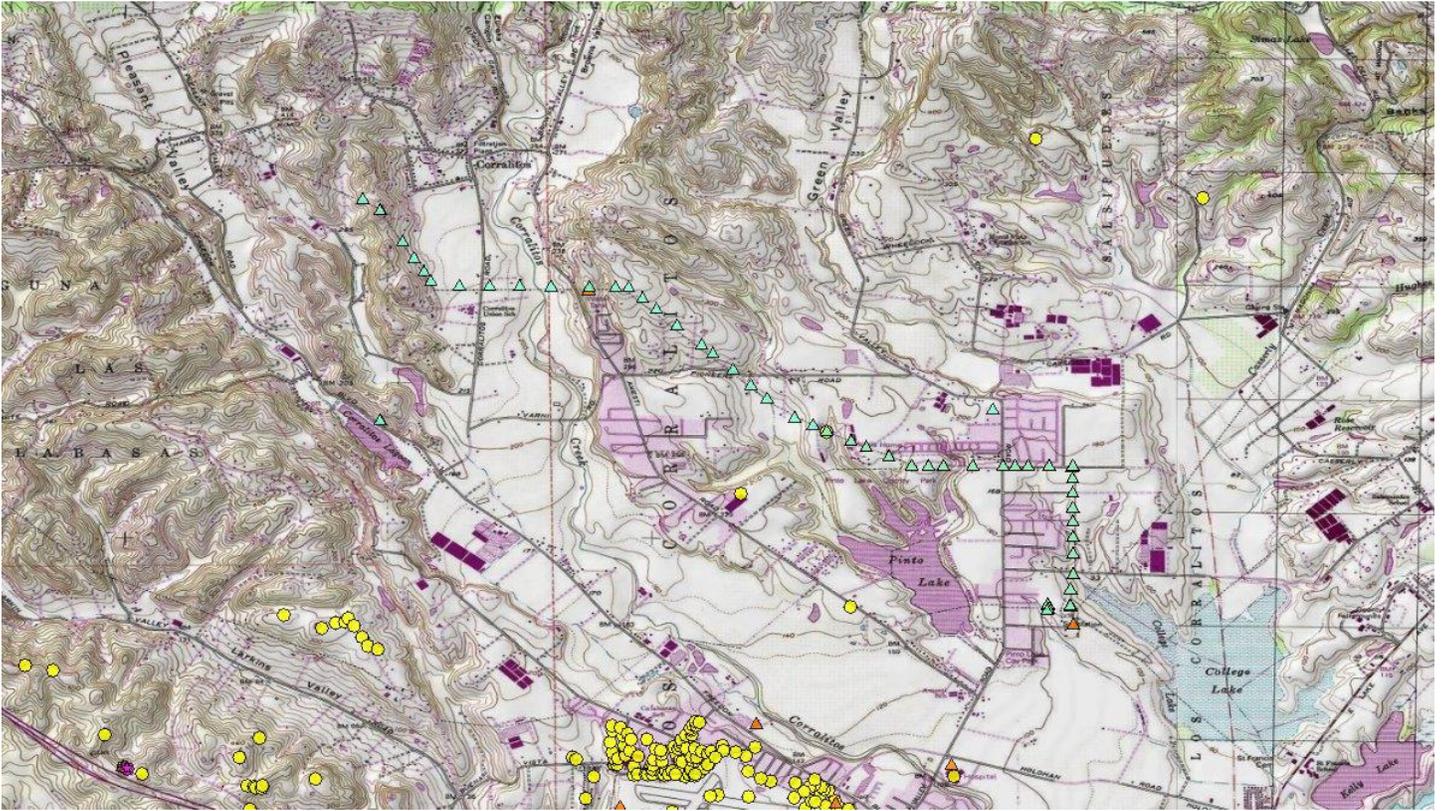
Karen McDonald
Specialist

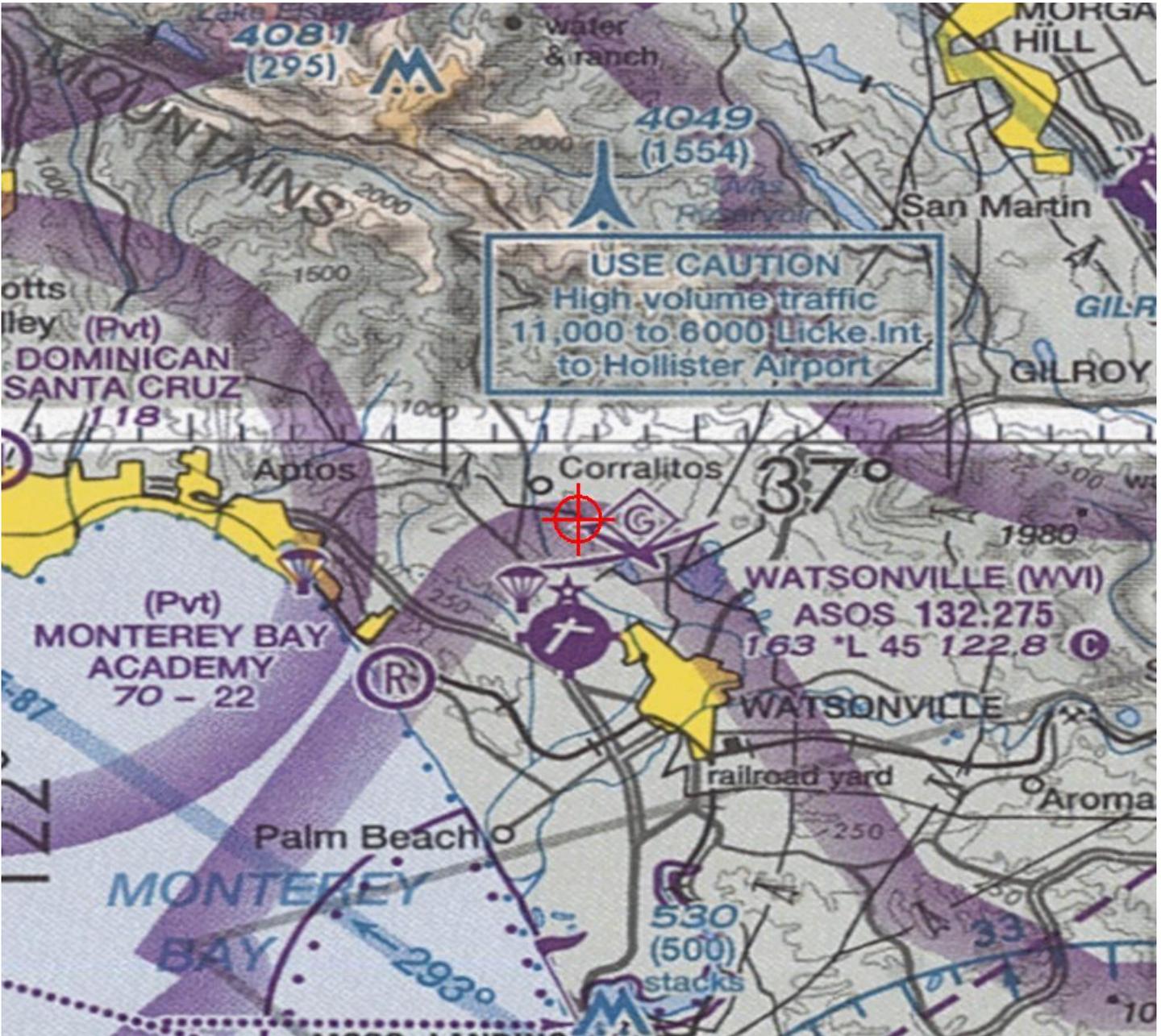
Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6977-OE

PROPOSEING TO INSTALL 36 OF 55 POLES FOR 115 kV REINFORCEMENT PROJECT

Verified Map for ASN 2013-AWP-6977-OE







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6978-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr 2/33
 Location: WATSONVILLE, CA
 Latitude: 36-58-30.19N NAD 83
 Longitude: 121-47-26.24W
 Heights: 297 feet site elevation (SE)
 105 feet above ground level (AGL)
 402 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6978-OE.

Signature Control No: 201107585-205349657

(DNE)

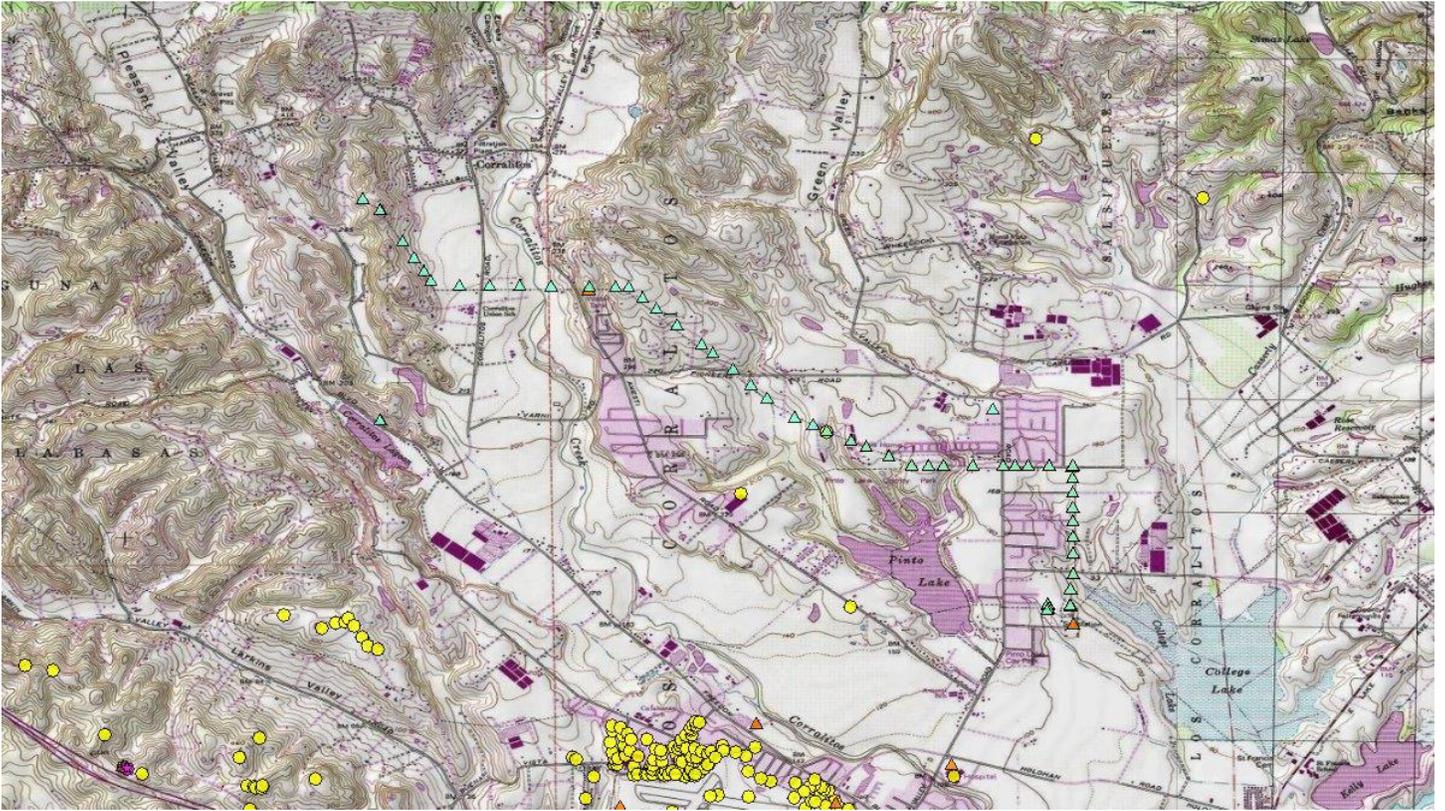
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6978-OE

PROPOSEING TO INSTALL 37 OF 55 POLES FOR 115 kV REINFORCEMENT PROJECT

Verified Map for ASN 2013-AWP-6978-OE





Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6979-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr 3/34
 Location: WATSONVILLE, CA
 Latitude: 36-58-34.82N NAD 83
 Longitude: 121-47-32.14W
 Heights: 345 feet site elevation (SE)
 95 feet above ground level (AGL)
 440 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6979-OE.

Signature Control No: 201107586-205349658

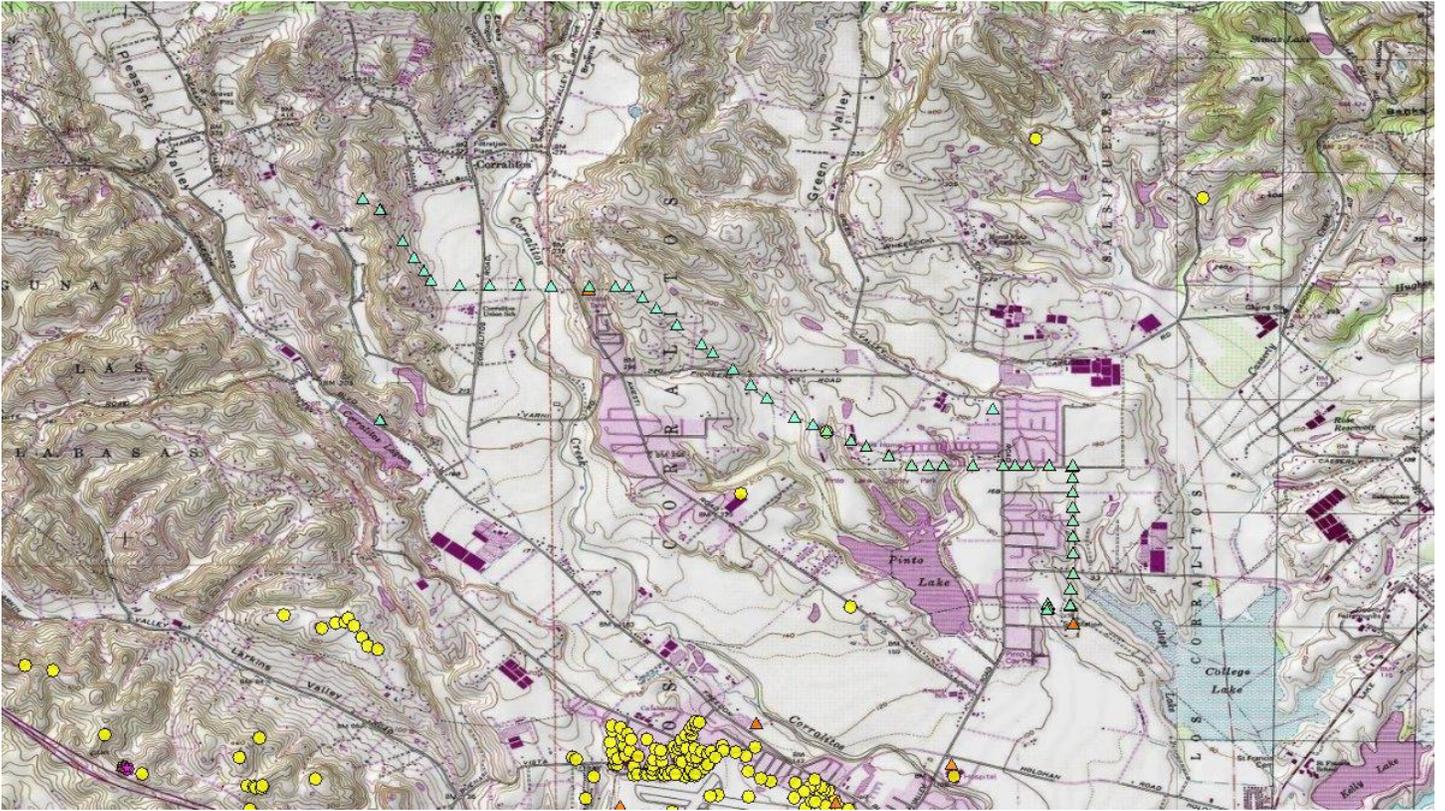
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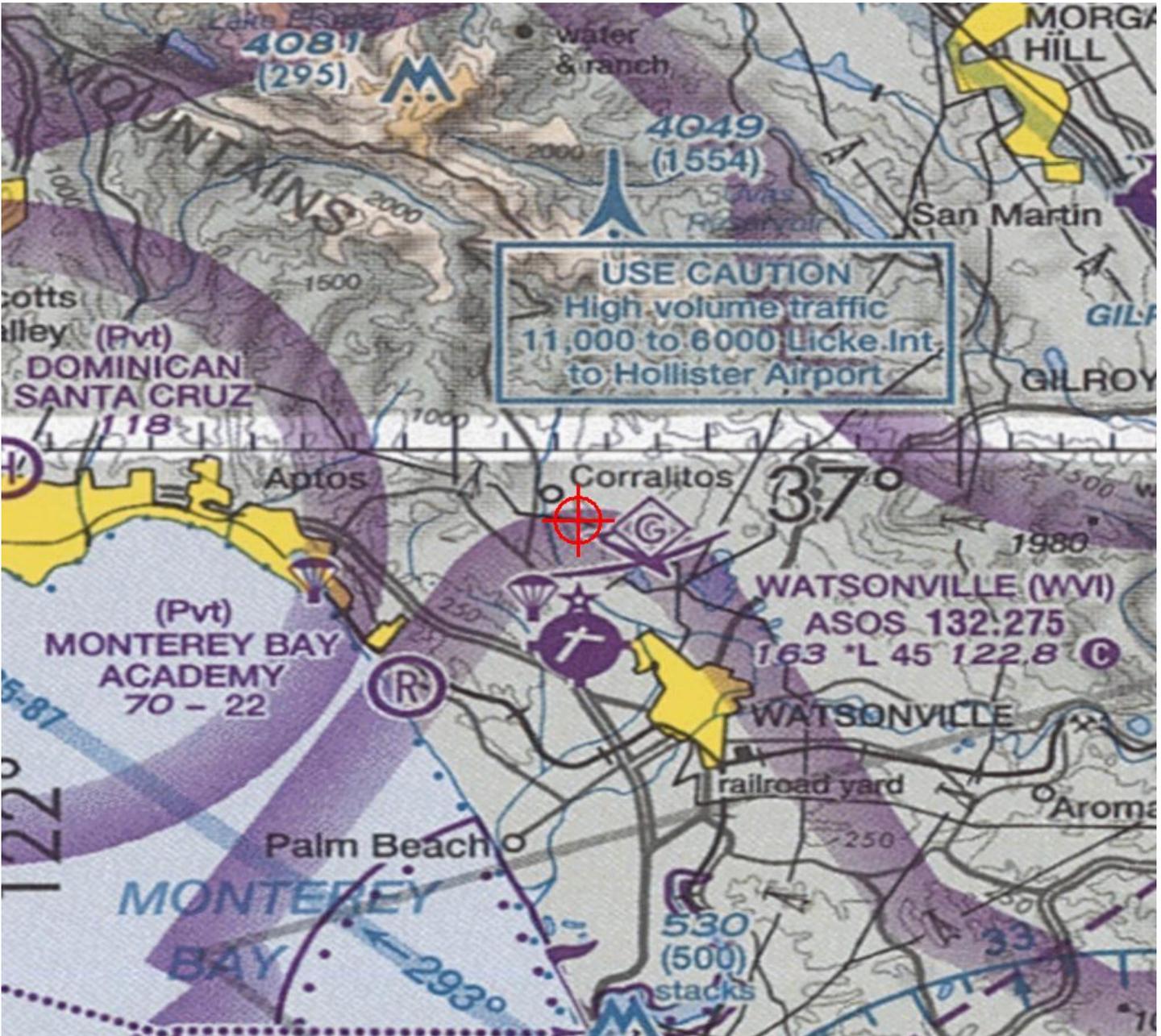
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6979-OE

PROPOSEING TO INSTALL 38 OF 55 POLES FOR 115 kV REINFORCEMENT PROJECT







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6980-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr 3/35
 Location: WATSONVILLE, CA
 Latitude: 36-58-37.93N NAD 83
 Longitude: 121-47-36.10W
 Heights: 365 feet site elevation (SE)
 95 feet above ground level (AGL)
 460 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6980-OE.

Signature Control No: 201107587-205349659

(DNE)

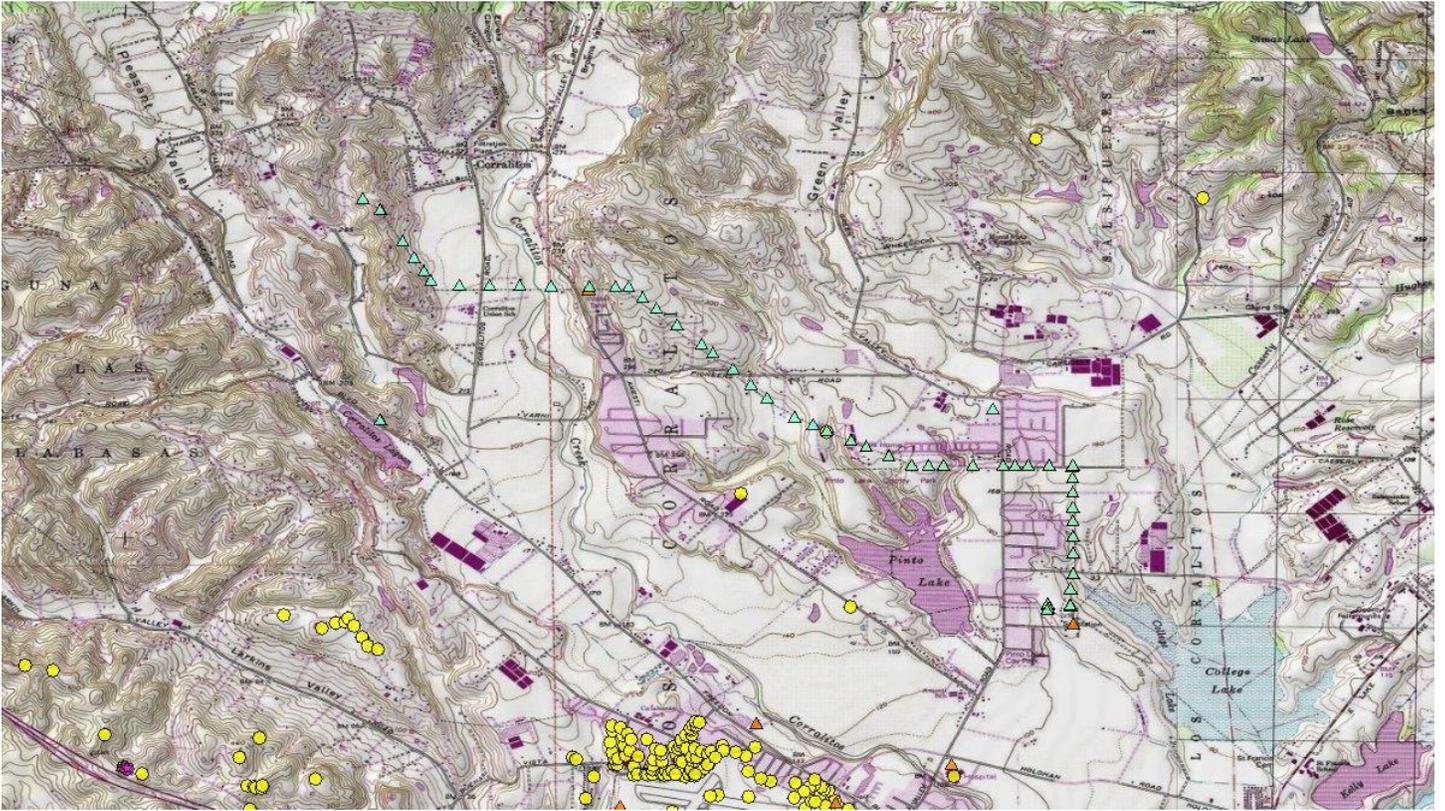
Karen McDonald
Specialist

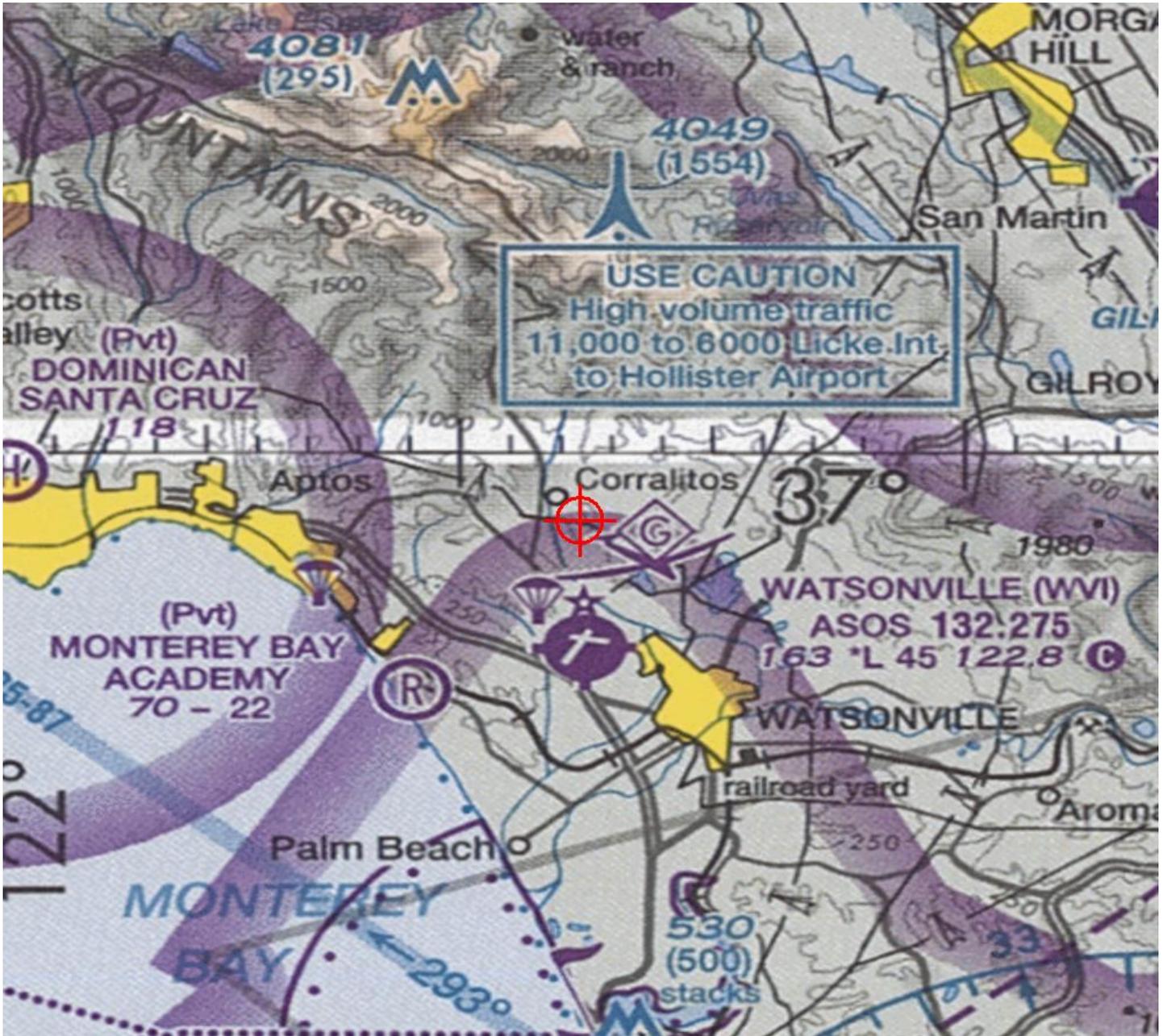
Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6980-OE

PROPOSEING TO INSTALL 39 OF 55 POLES FOR 115 kV REINFORCEMENT PROJECT

Verified Map for ASN 2013-AWP-6980-OE







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6981-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr 3/36
 Location: WATSONVILLE, CA
 Latitude: 36-58-41.04N NAD 83
 Longitude: 121-47-40.06W
 Heights: 395 feet site elevation (SE)
 70 feet above ground level (AGL)
 465 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6981-OE.

Signature Control No: 201107588-205349660

(DNE)

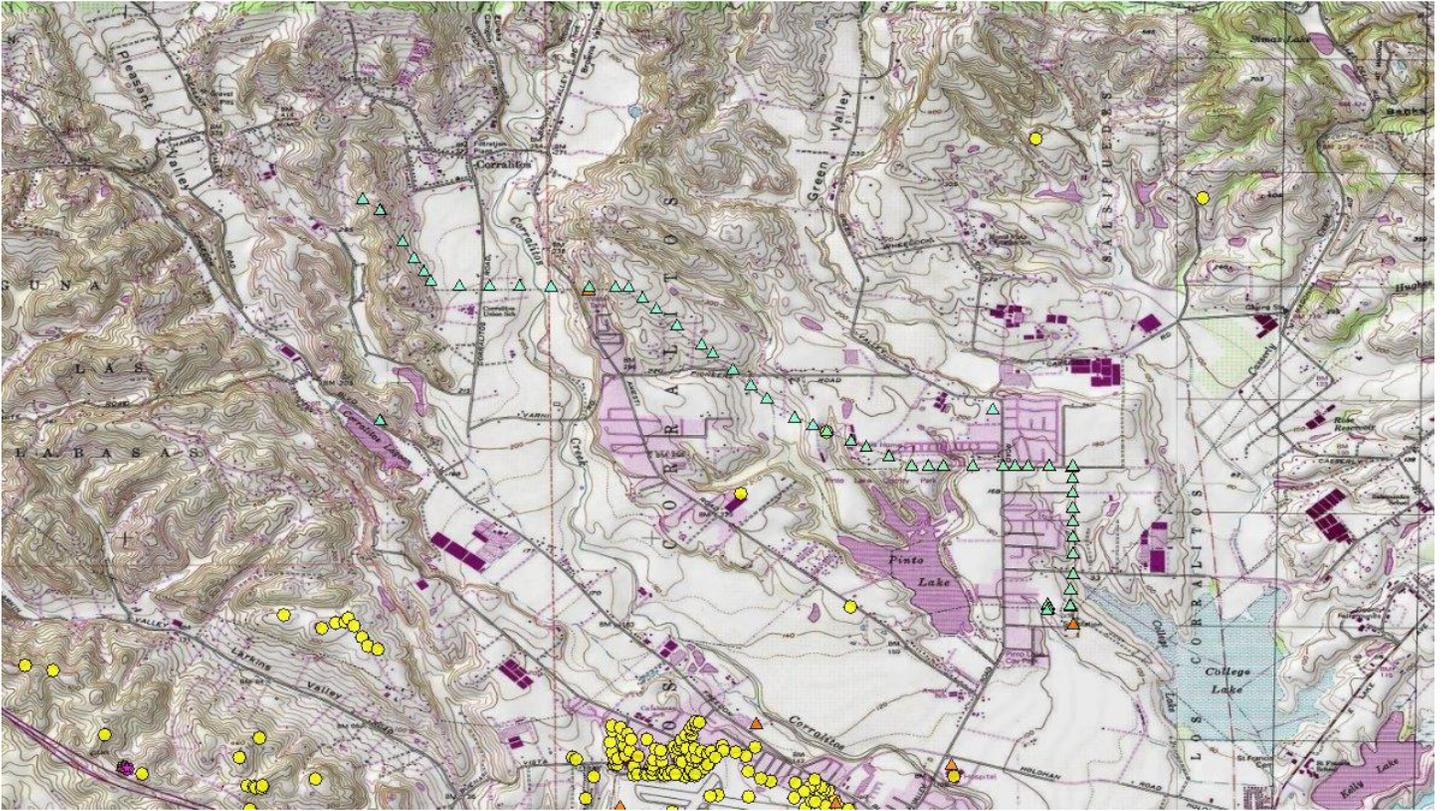
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6981-OE

PROPOSEING TO INSTALL 40 OF 55 POLES FOR 115 kV REINFORCEMENT PROJECT

Verified Map for ASN 2013-AWP-6981-OE







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6982-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr 3/37
 Location: WATSONVILLE, CA
 Latitude: 36-58-41.06N NAD 83
 Longitude: 121-47-43.82W
 Heights: 383 feet site elevation (SE)
 80 feet above ground level (AGL)
 463 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6982-OE.

Signature Control No: 201107589-205349661

(DNE)

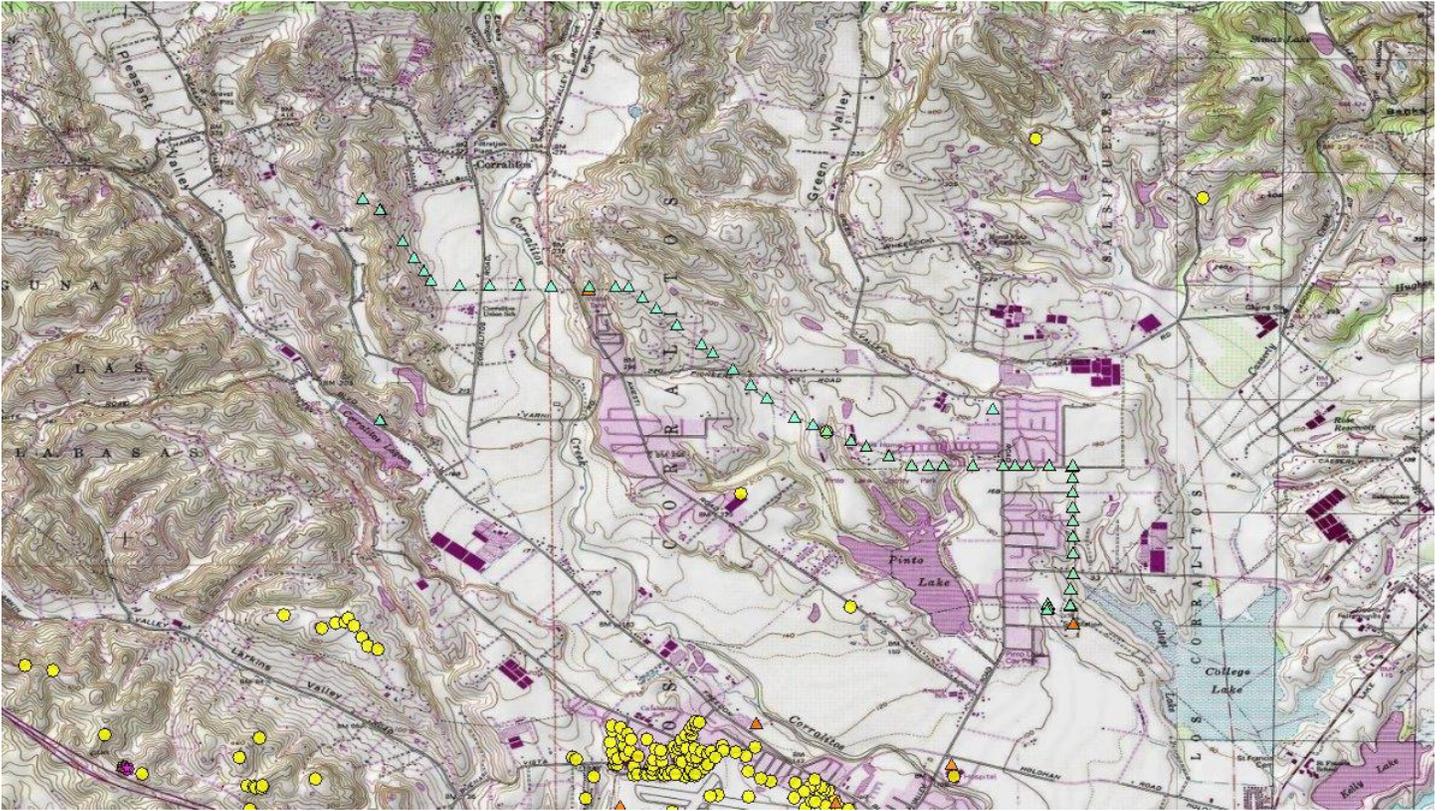
Karen McDonald
Specialist

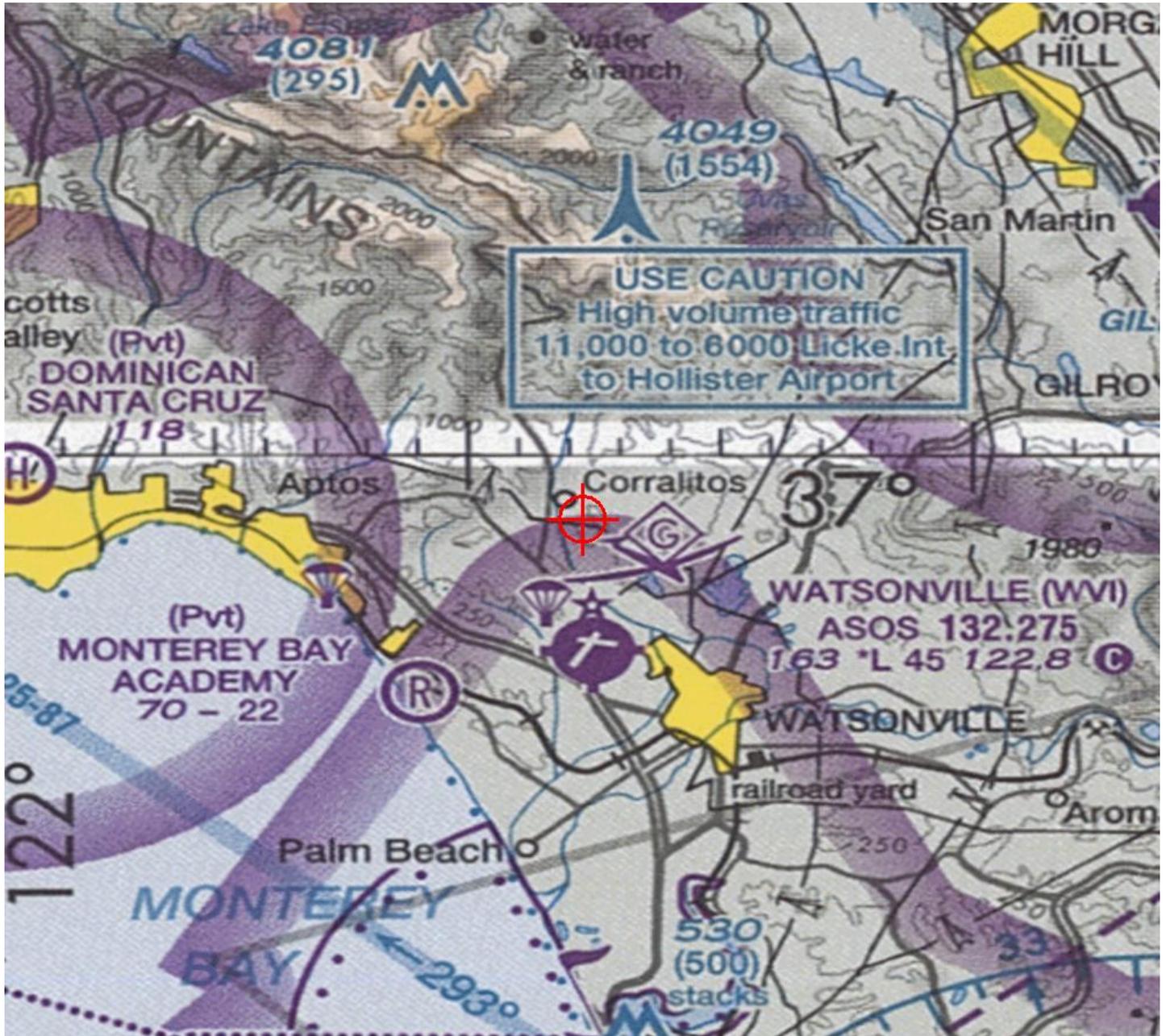
Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6982-OE

PROPOSEING TO INSTALL 41 OF 55 POLES FOR 115 kV REINFORCEMENT PROJECT

Verified Map for ASN 2013-AWP-6982-OE







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6983-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr 3/38
 Location: WATSONVILLE, CA
 Latitude: 36-58-41.11N NAD 83
 Longitude: 121-47-51.30W
 Heights: 385 feet site elevation (SE)
 90 feet above ground level (AGL)
 475 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6983-OE.

Signature Control No: 201107590-205349662

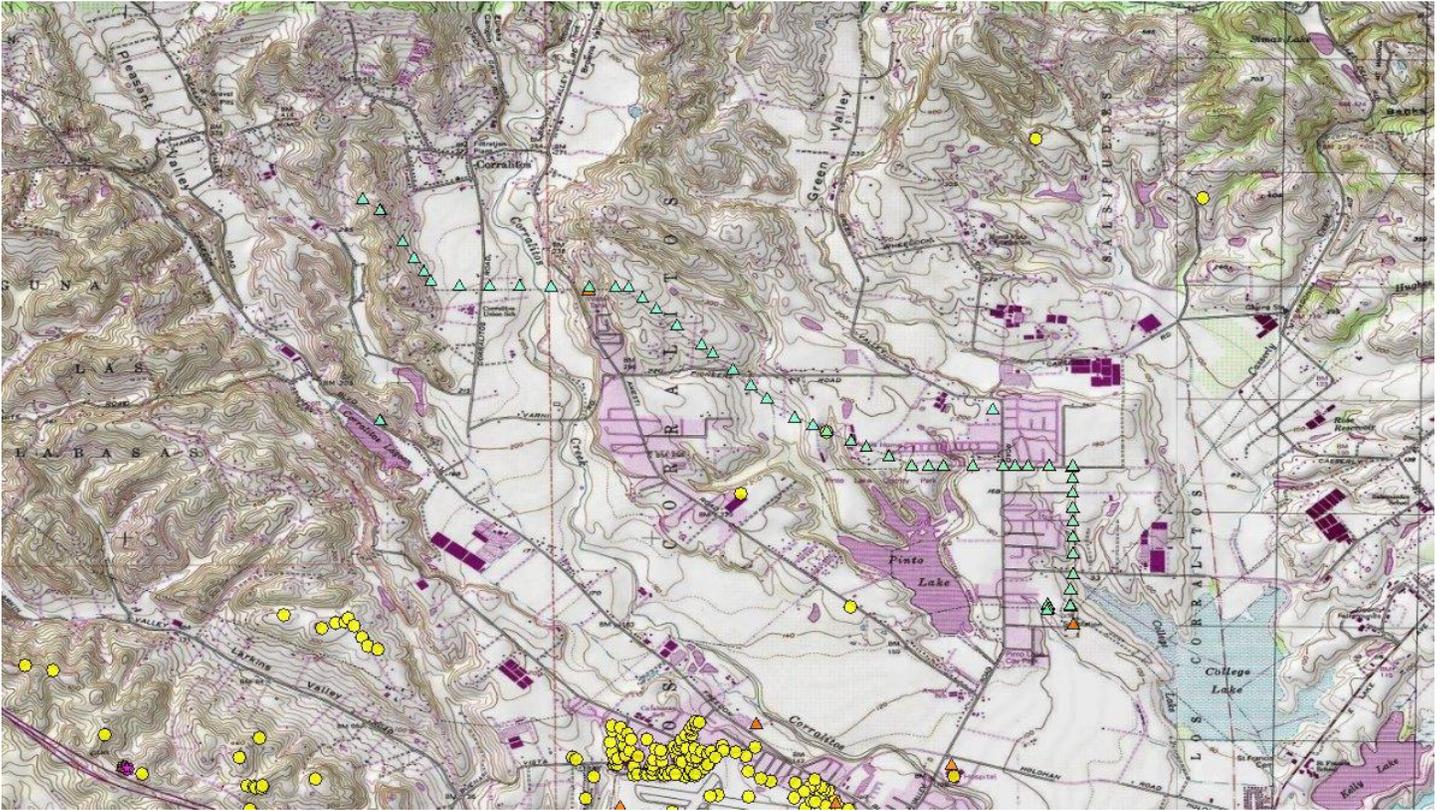
(DNE)

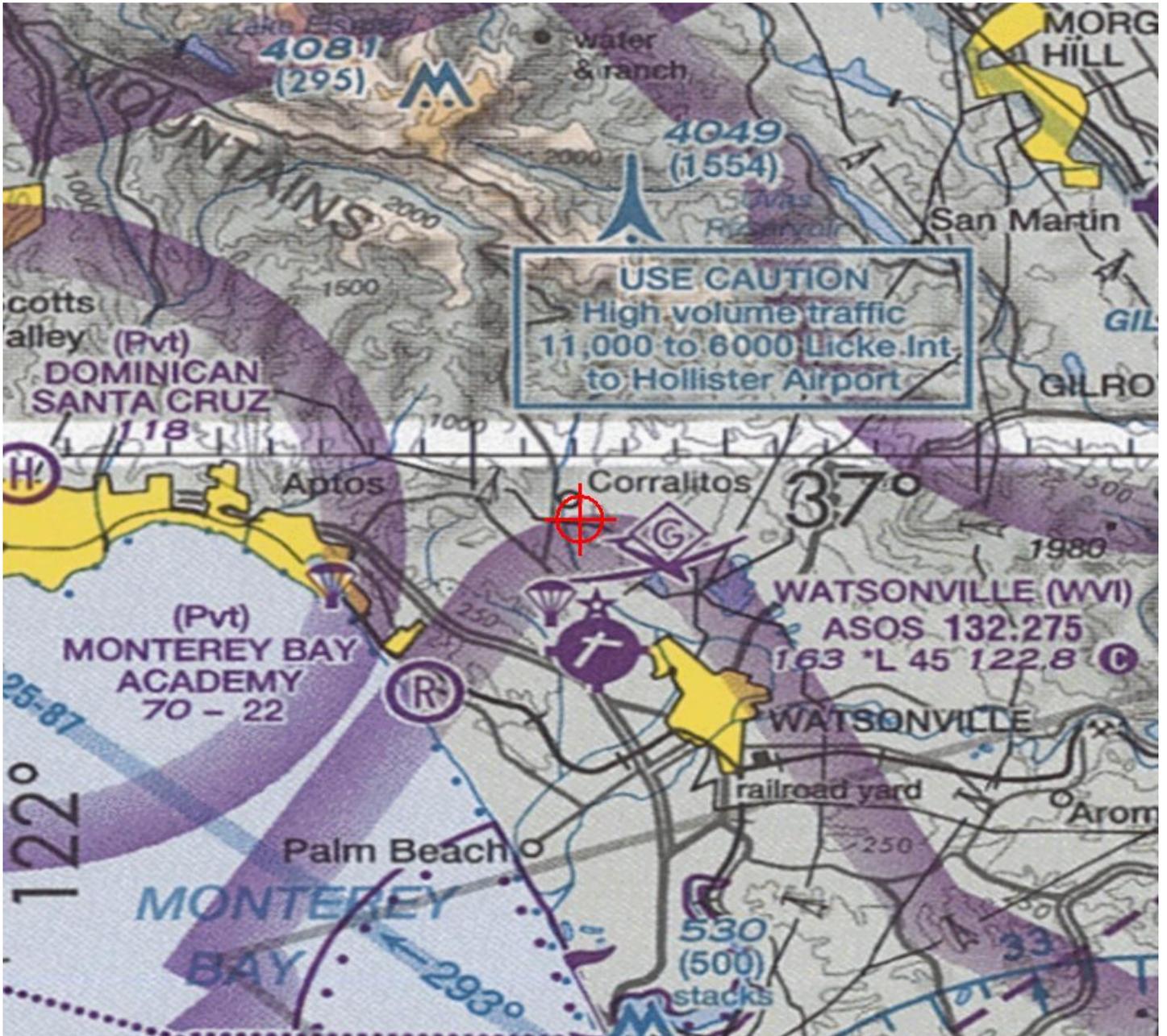
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6983-OE

PROPOSEING TO INSTALL 42 OF 55 POLES FOR 115 kV REINFORCEMENT PROJECT







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6984-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr 3/39
 Location: WATSONVILLE, CA
 Latitude: 36-58-41.30N NAD 83
 Longitude: 121-48-02.22W
 Heights: 218 feet site elevation (SE)
 100 feet above ground level (AGL)
 318 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6984-OE.

Signature Control No: 201107591-205349663

(DNE)

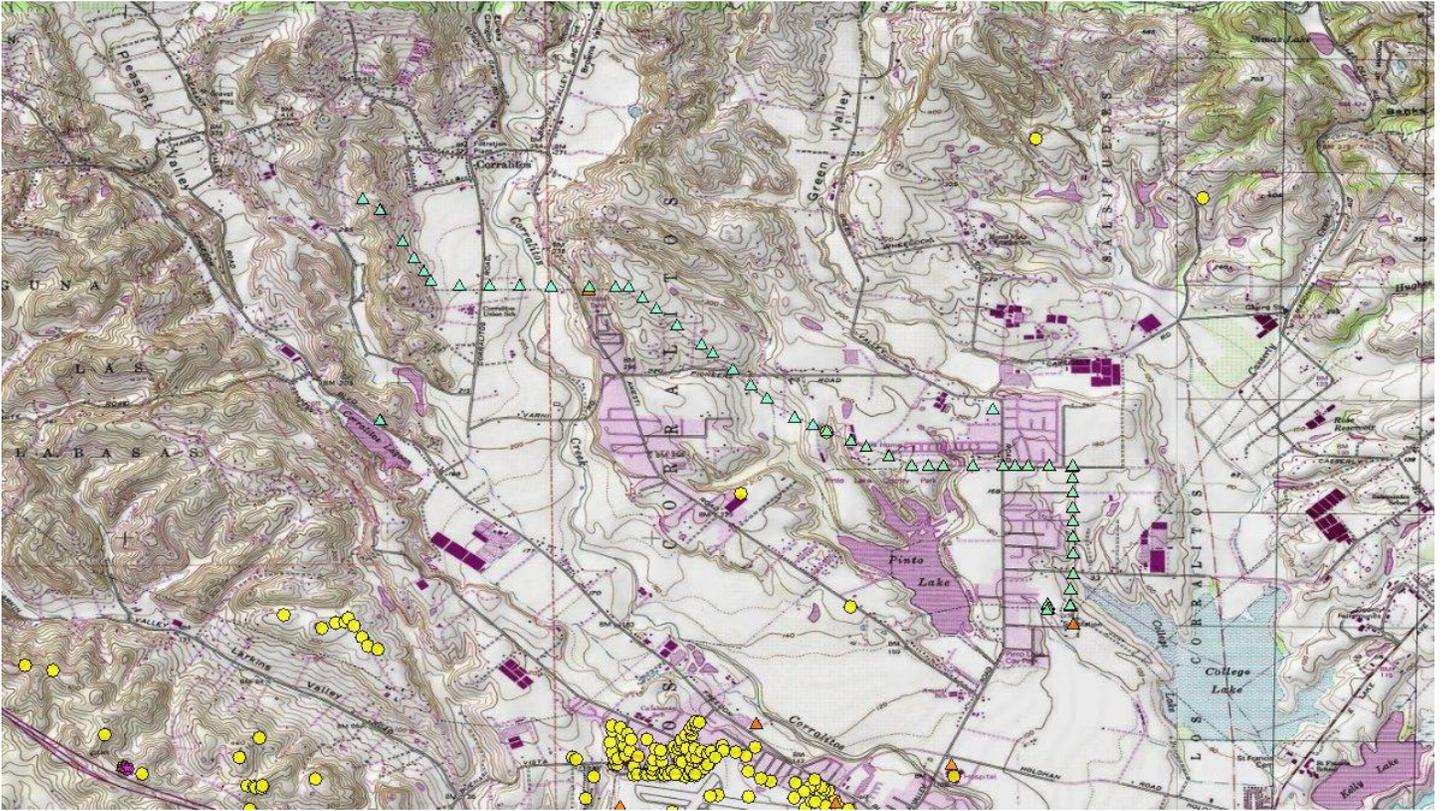
Karen McDonald
Specialist

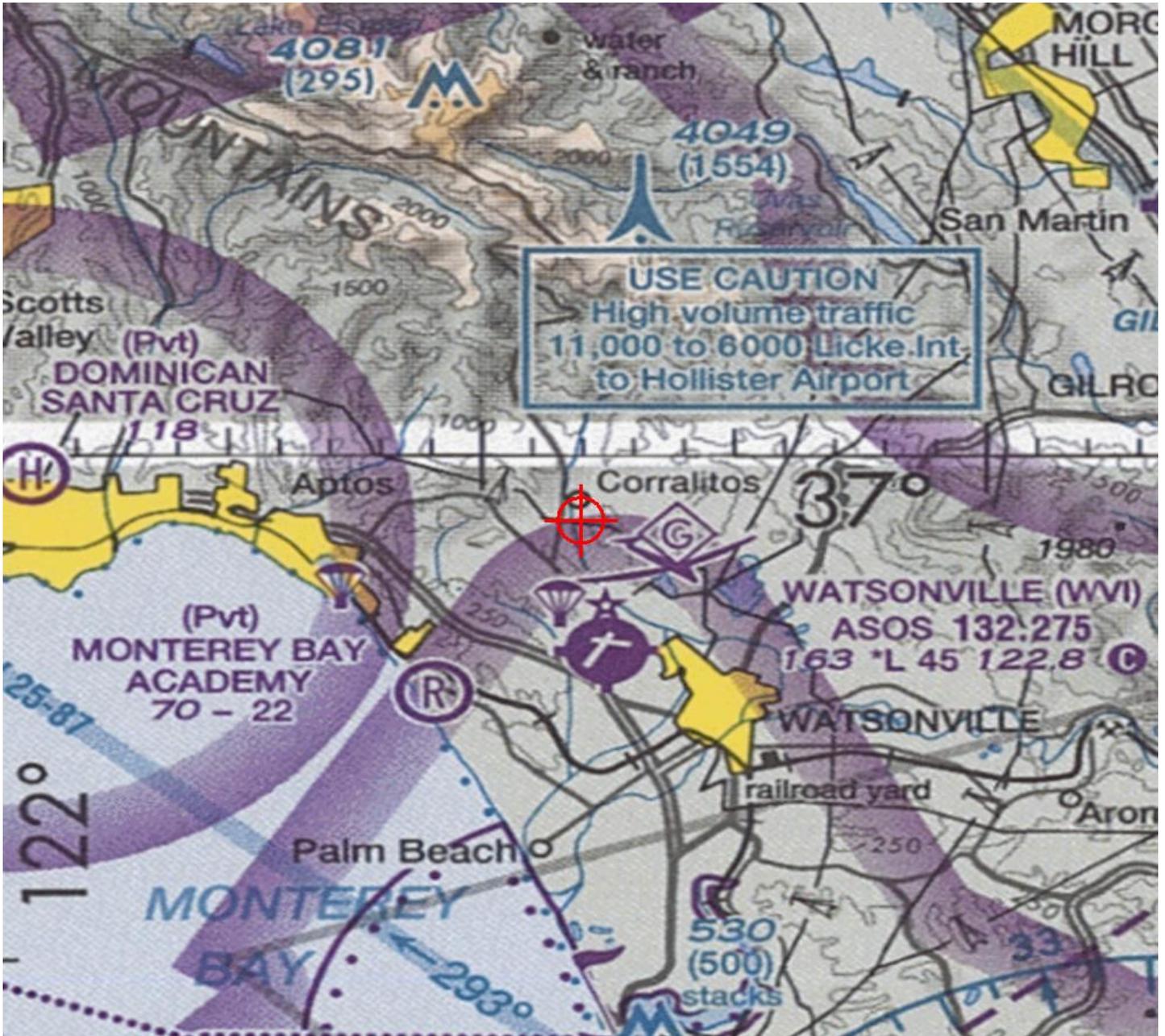
Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6984-OE

PROPOSEING TO INSTALL 43 OF 55 POLES FOR 115 kV REINFORCEMENT PROJECT

Verified Map for ASN 2013-AWP-6984-OE







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6985-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr 3/40
 Location: WATSONVILLE, CA
 Latitude: 36-58-41.37N NAD 83
 Longitude: 121-48-11.16W
 Heights: 232 feet site elevation (SE)
 95 feet above ground level (AGL)
 327 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6985-OE.

Signature Control No: 201107592-205349664

(DNE)

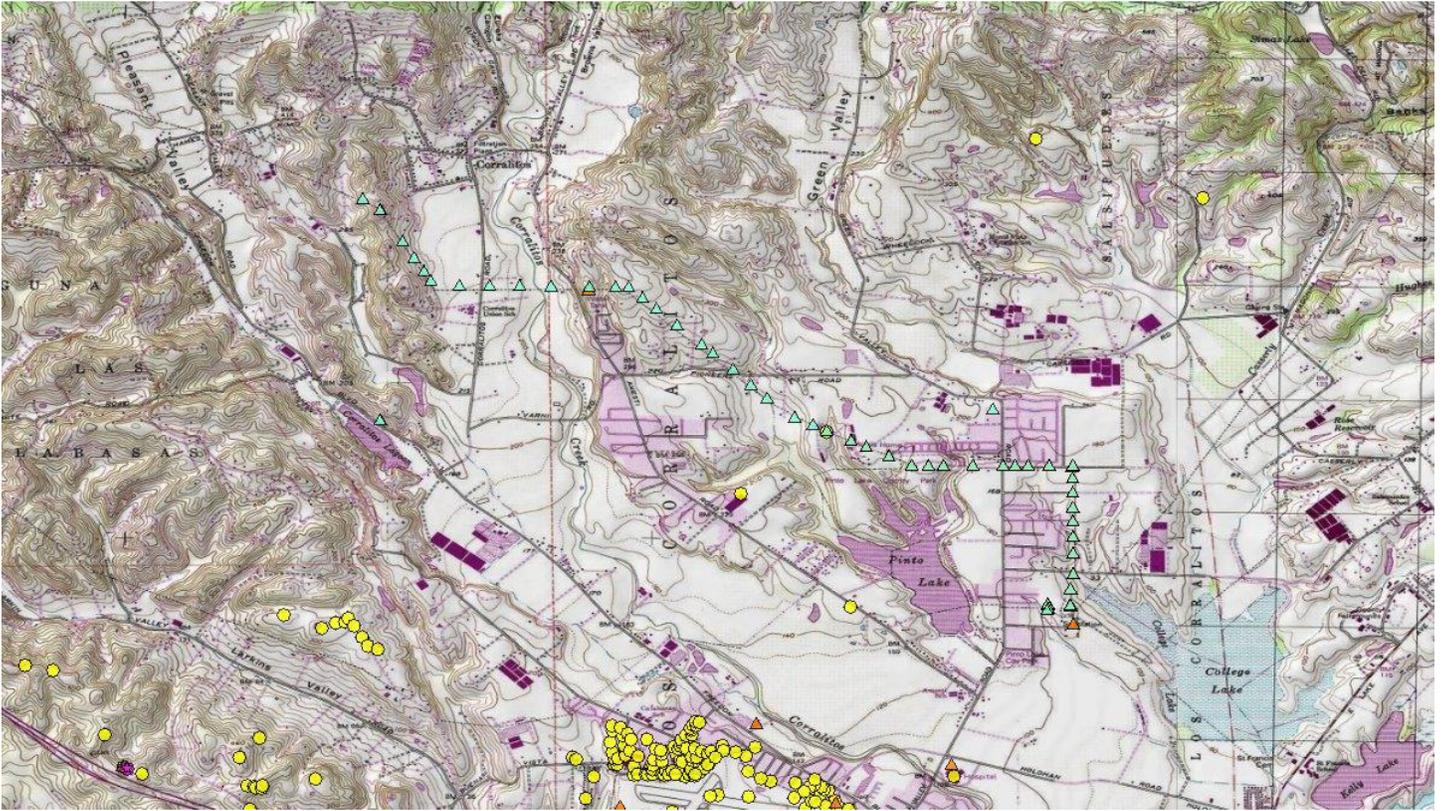
Karen McDonald
Specialist

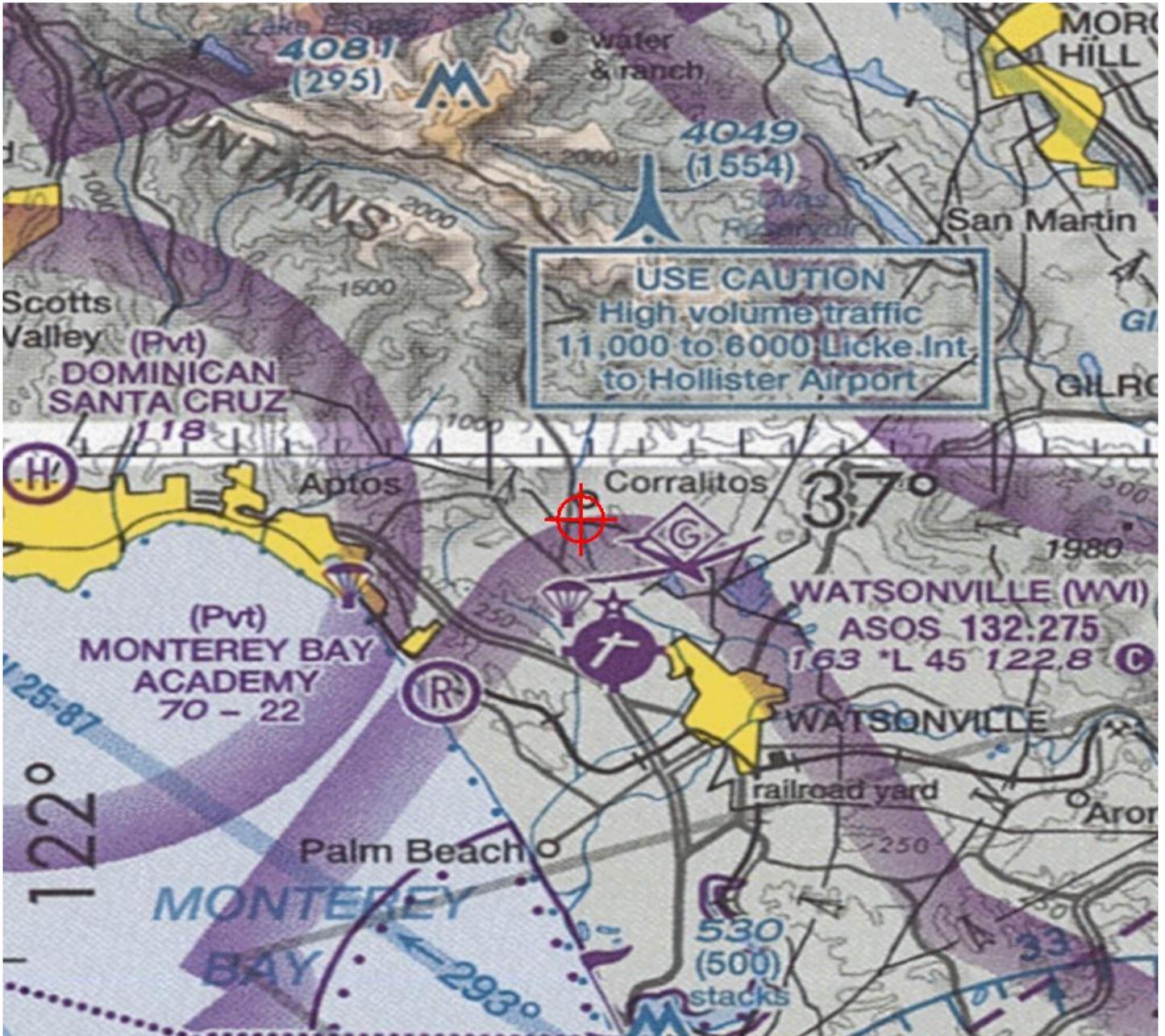
Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6985-OE

PROPOSEING TO INSTALL 44 OF 55 POLES FOR 115 kV REINFORCEMENT PROJECT

Verified Map for ASN 2013-AWP-6985-OE







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6986-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr 3/41
 Location: WATSONVILLE, CA
 Latitude: 36-58-41.41N NAD 83
 Longitude: 121-48-19.79W
 Heights: 239 feet site elevation (SE)
 105 feet above ground level (AGL)
 344 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6986-OE.

Signature Control No: 201107593-205349665

(DNE)

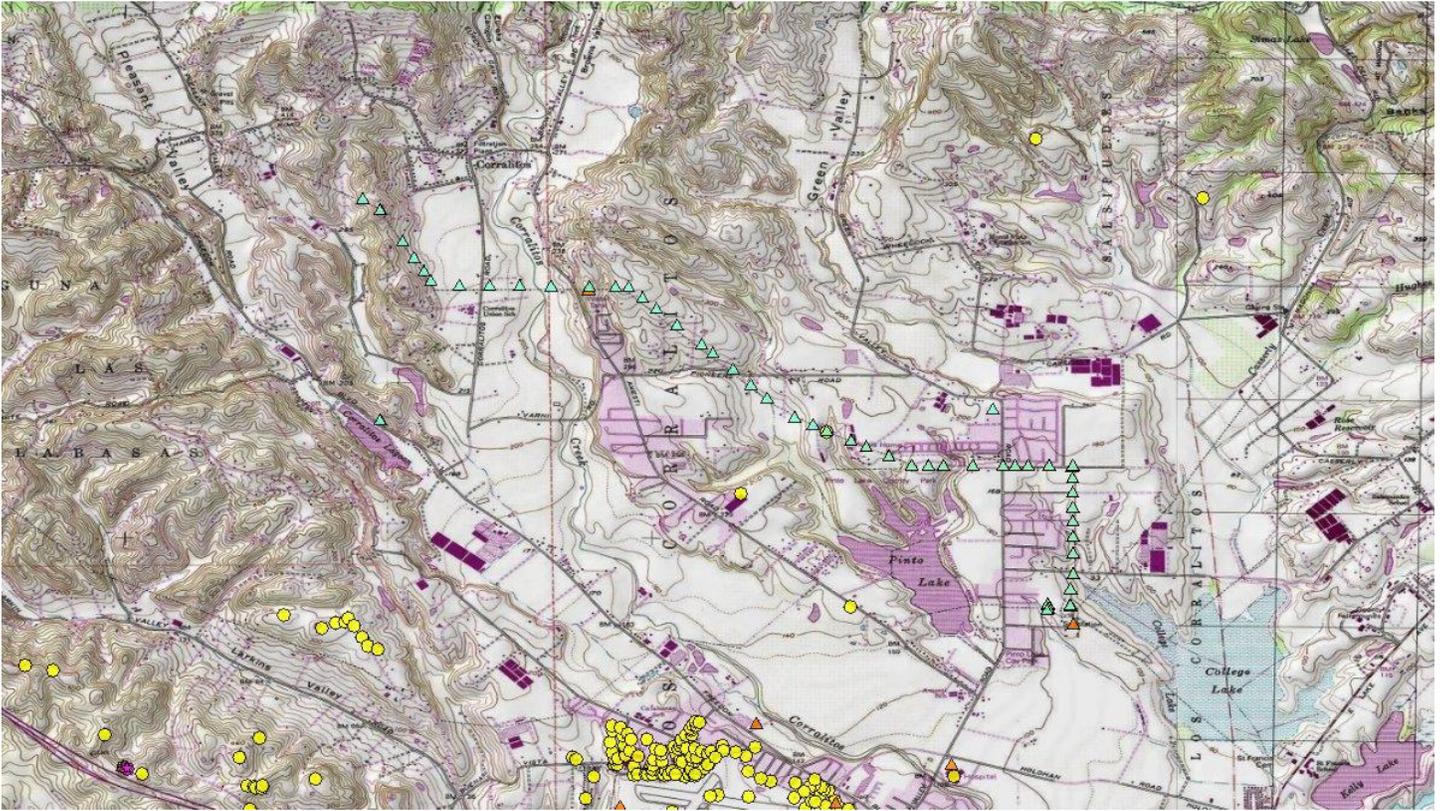
Karen McDonald
Specialist

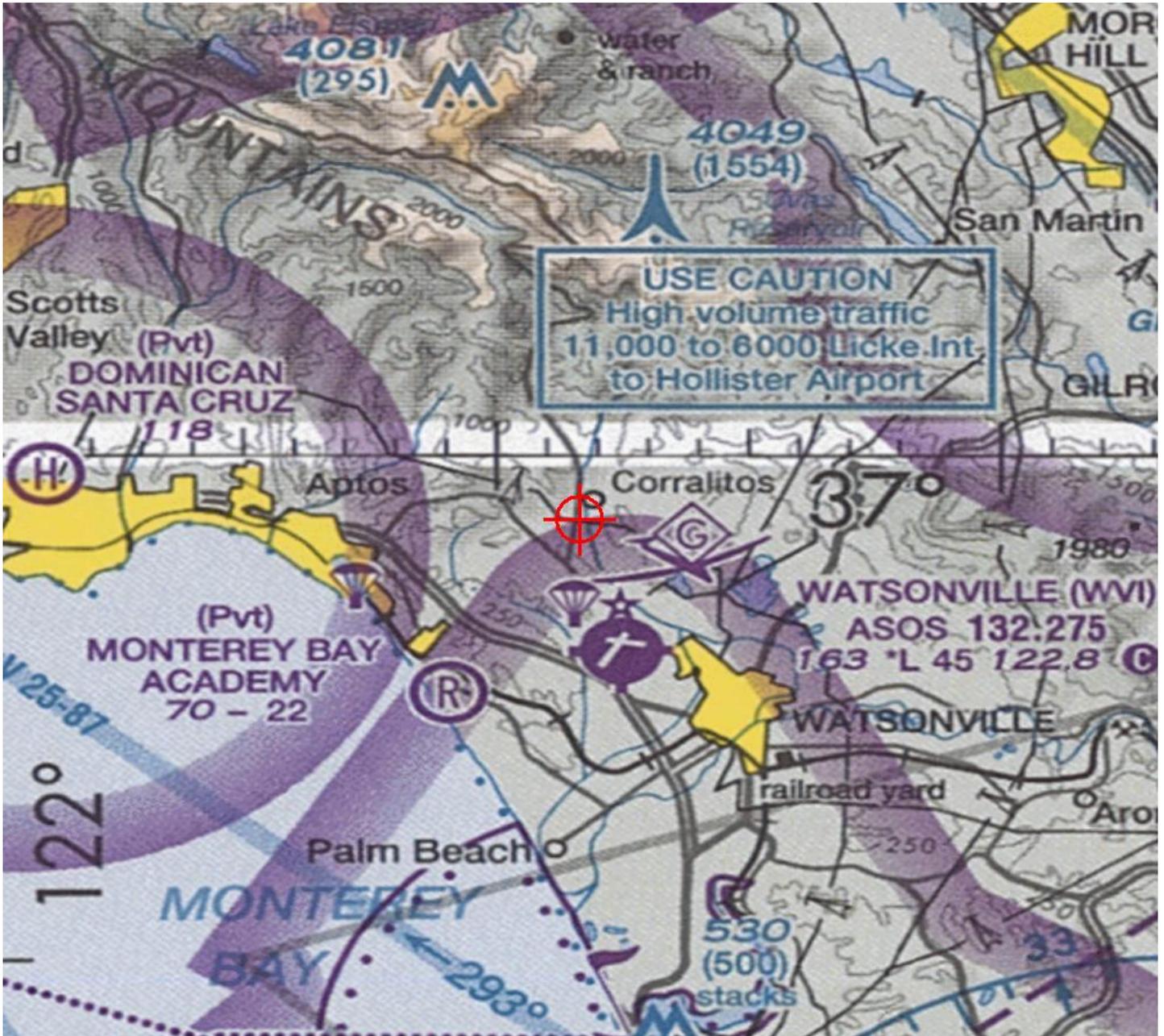
Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6986-OE

PROPOSEING TO INSTALL 45 OF 55 POLES FOR 115 kV REINFORCEMENT PROJECT

Verified Map for ASN 2013-AWP-6986-OE







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6987-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr 3/42
 Location: WATSONVILLE, CA
 Latitude: 36-58-41.45N NAD 83
 Longitude: 121-48-28.41W
 Heights: 240 feet site elevation (SE)
 105 feet above ground level (AGL)
 345 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6987-OE.

Signature Control No: 201107594-205349666

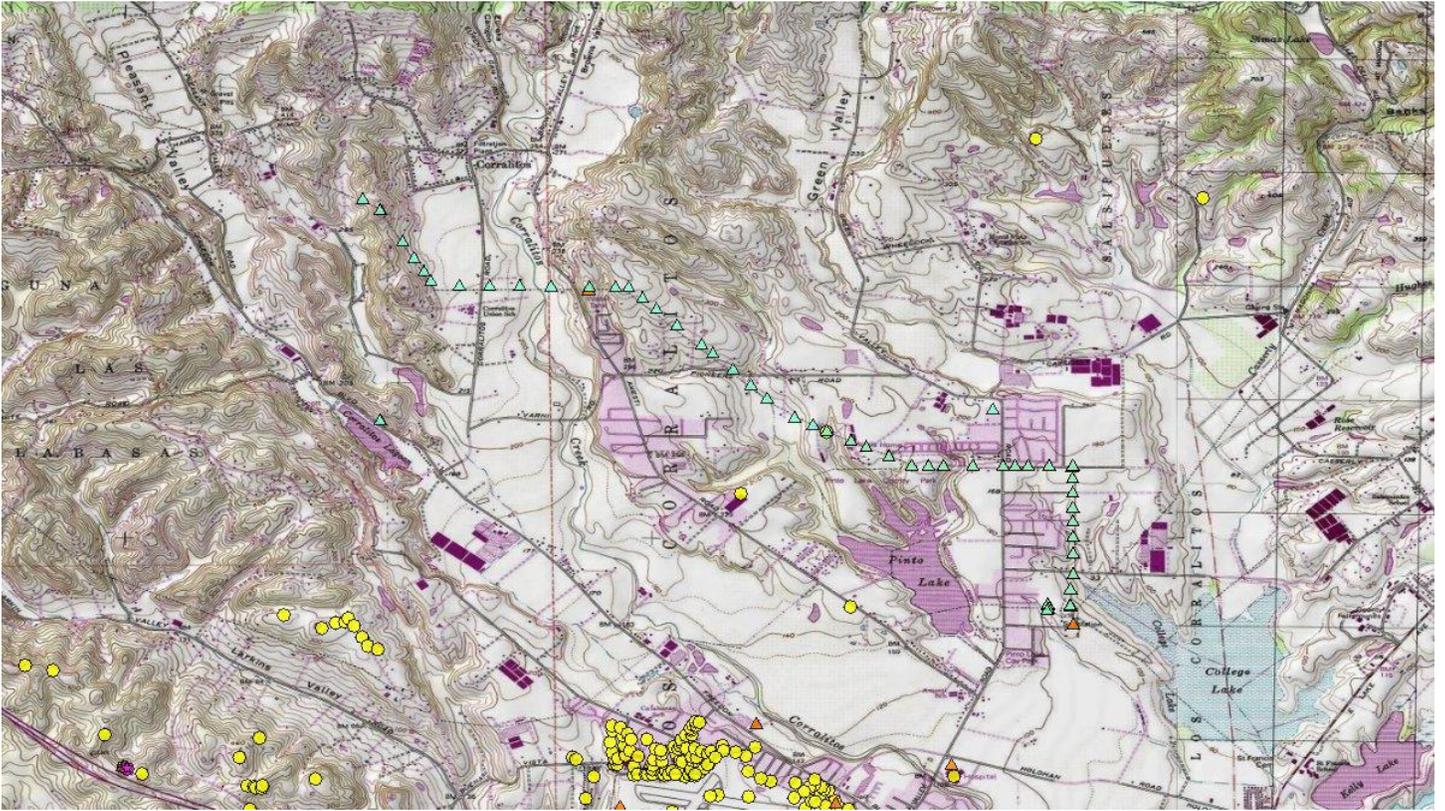
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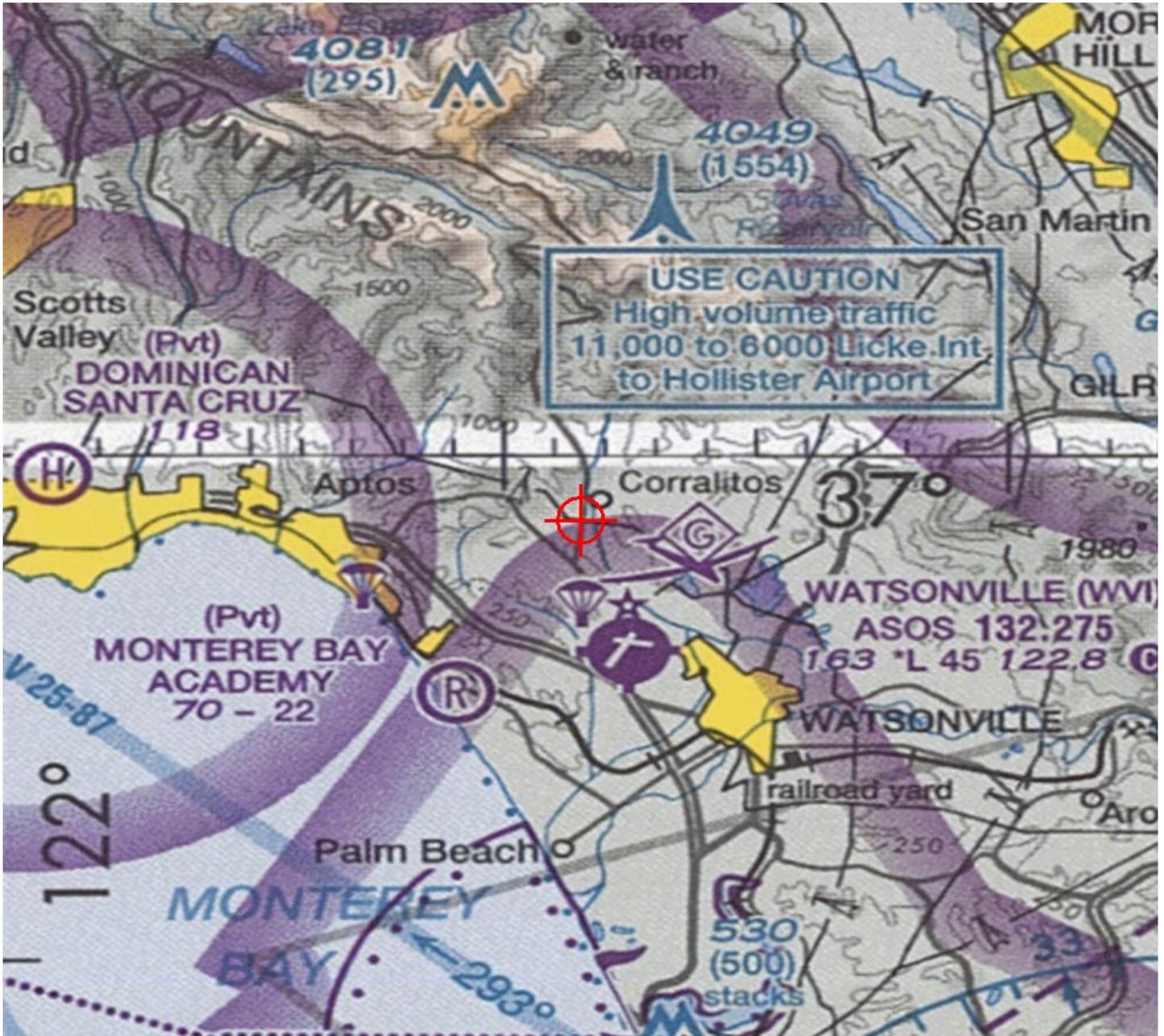
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6987-OE

PROPOSEING TO INSTALL 46 OF 55 POLES FOR 115 kV REINFORCEMENT PROJECT







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6988-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr 4/43
 Location: WATSONVILLE, CA
 Latitude: 36-58-42.87N NAD 83
 Longitude: 121-48-36.59W
 Heights: 262 feet site elevation (SE)
 95 feet above ground level (AGL)
 357 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6988-OE.

Signature Control No: 201107595-205349667

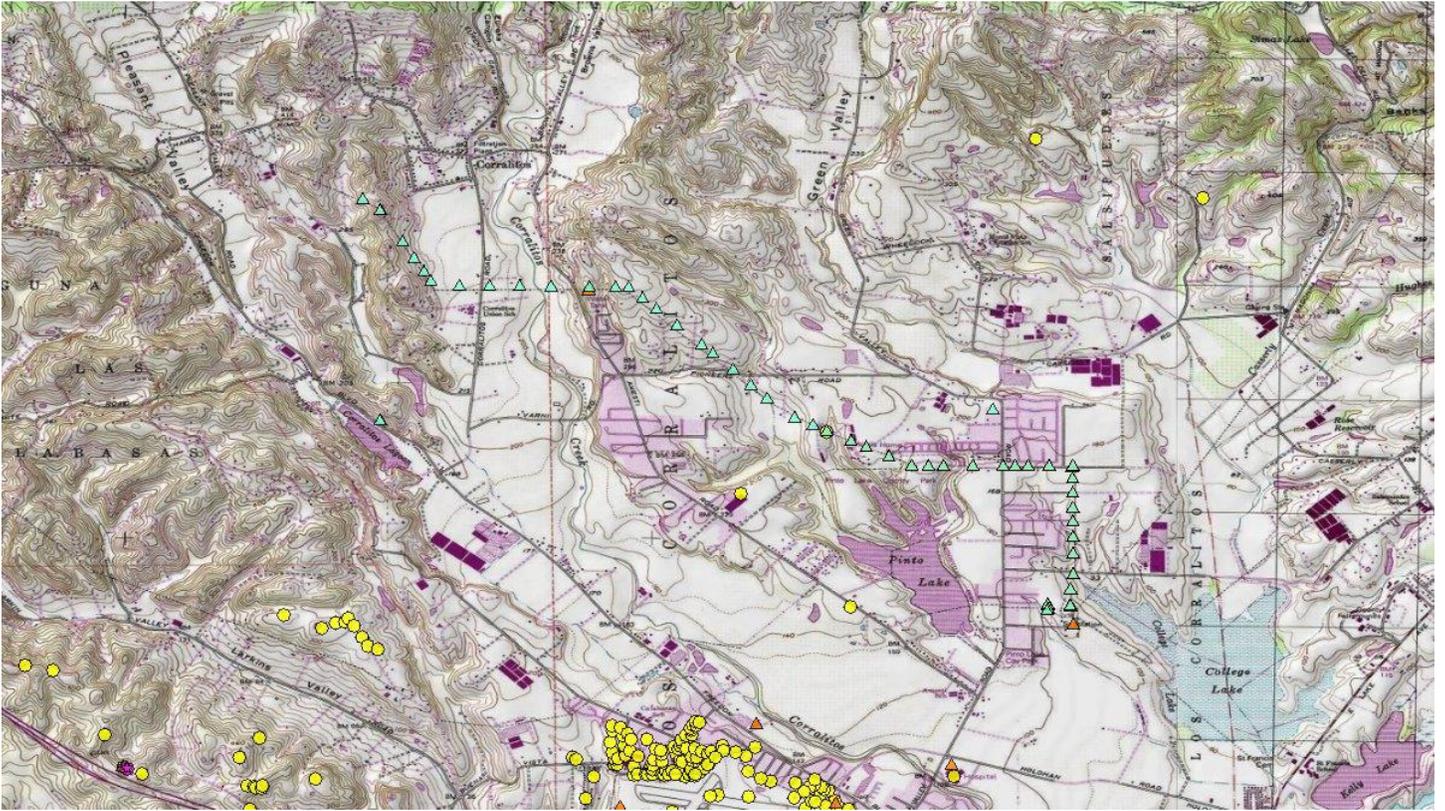
(DNE)

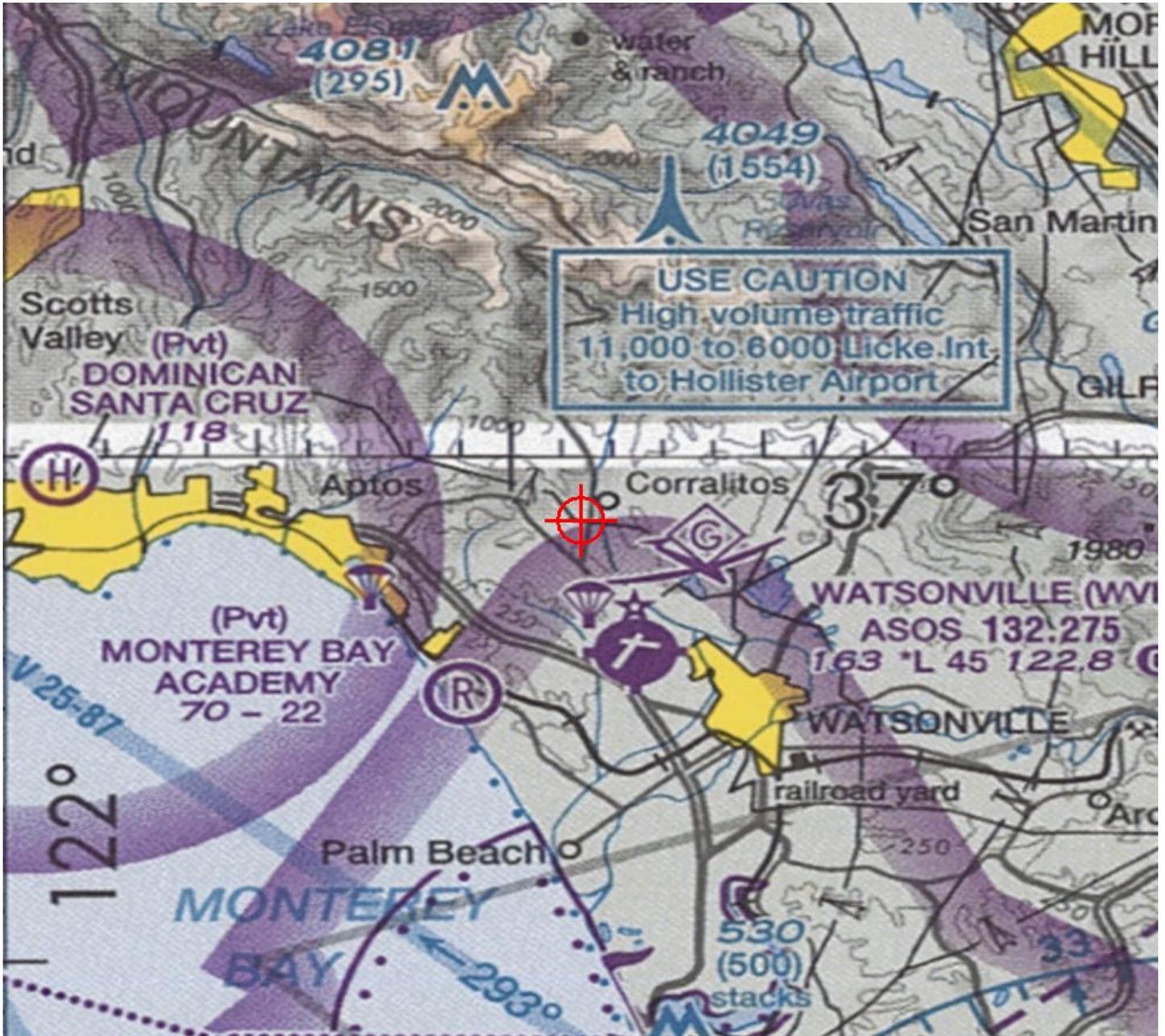
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6988-OE

PROPOSEING TO INSTALL 47 OF 55 POLES FOR 115 kV REINFORCEMENT PROJECT







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6989-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr 4/44
 Location: WATSONVILLE, CA
 Latitude: 36-58-45.45N NAD 83
 Longitude: 121-48-38.54W
 Heights: 291 feet site elevation (SE)
 90 feet above ground level (AGL)
 381 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6989-OE.

Signature Control No: 201107596-205349668

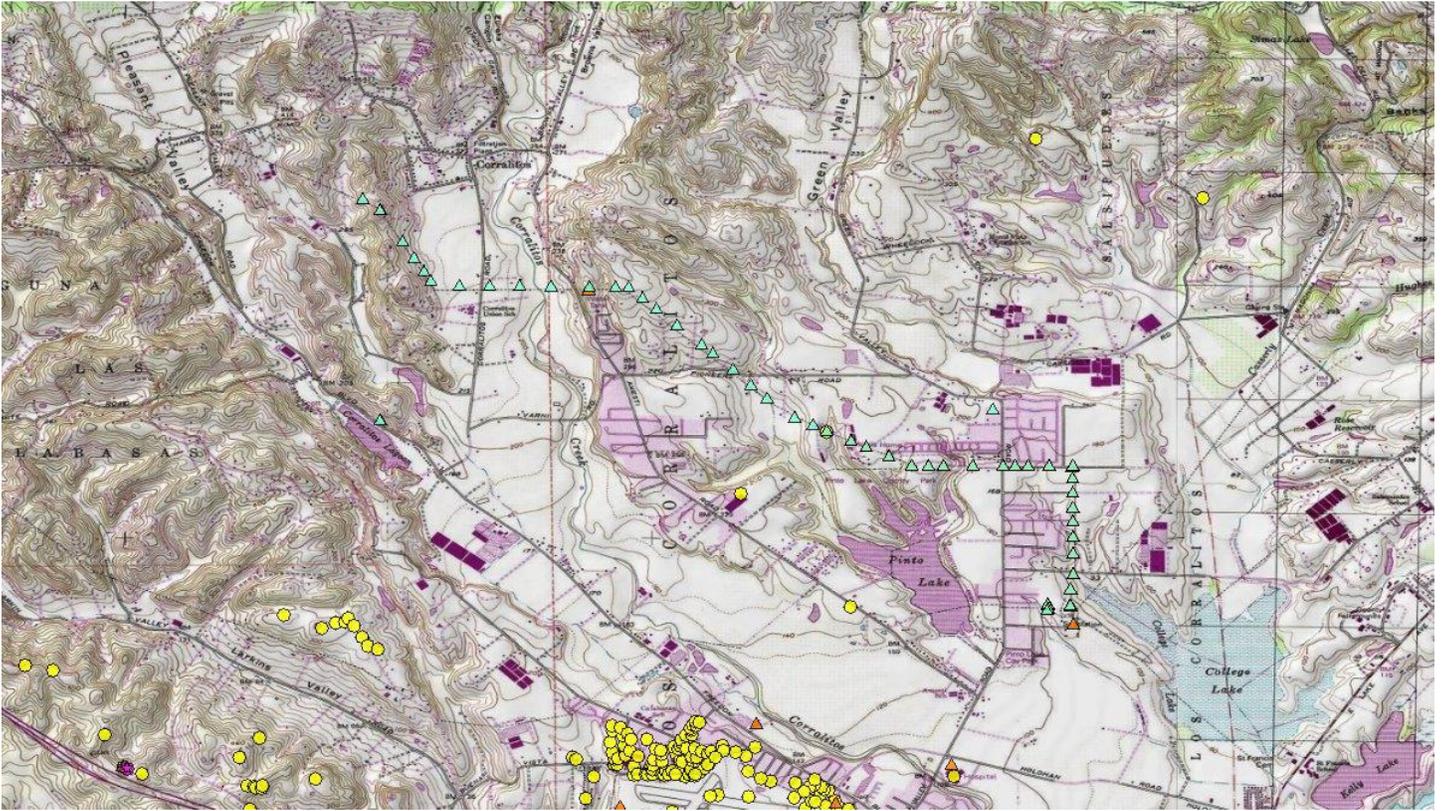
(DNE)

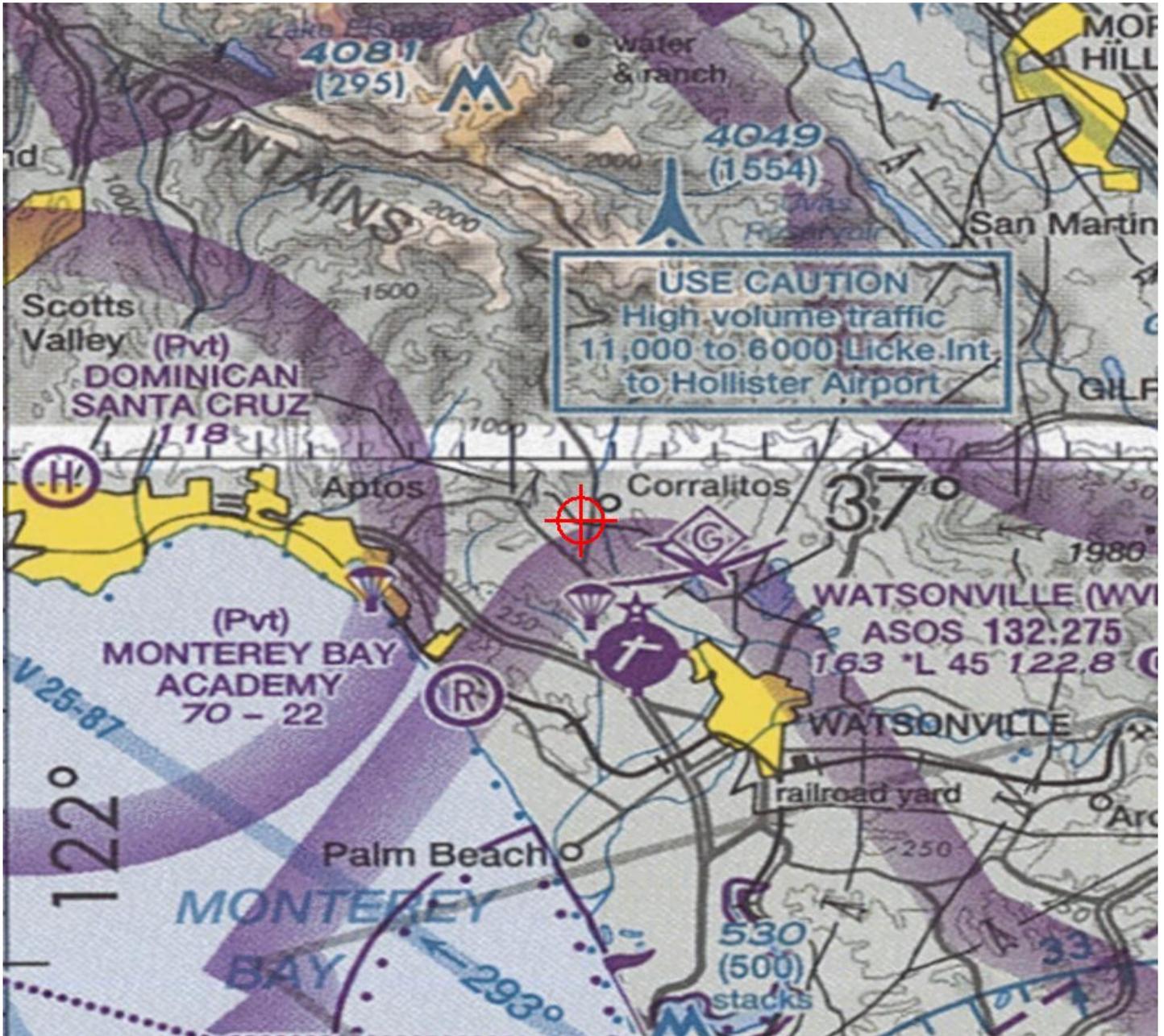
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6989-OE

PROPOSEING TO INSTALL 48 OF 55 POLES FOR 115 kV REINFORCEMENT PROJECT







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6990-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr 4/45
 Location: WATSONVILLE, CA
 Latitude: 36-58-49.44N NAD 83
 Longitude: 121-48-41.36W
 Heights: 317 feet site elevation (SE)
 90 feet above ground level (AGL)
 407 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6990-OE.

Signature Control No: 201107597-205349669

(DNE)

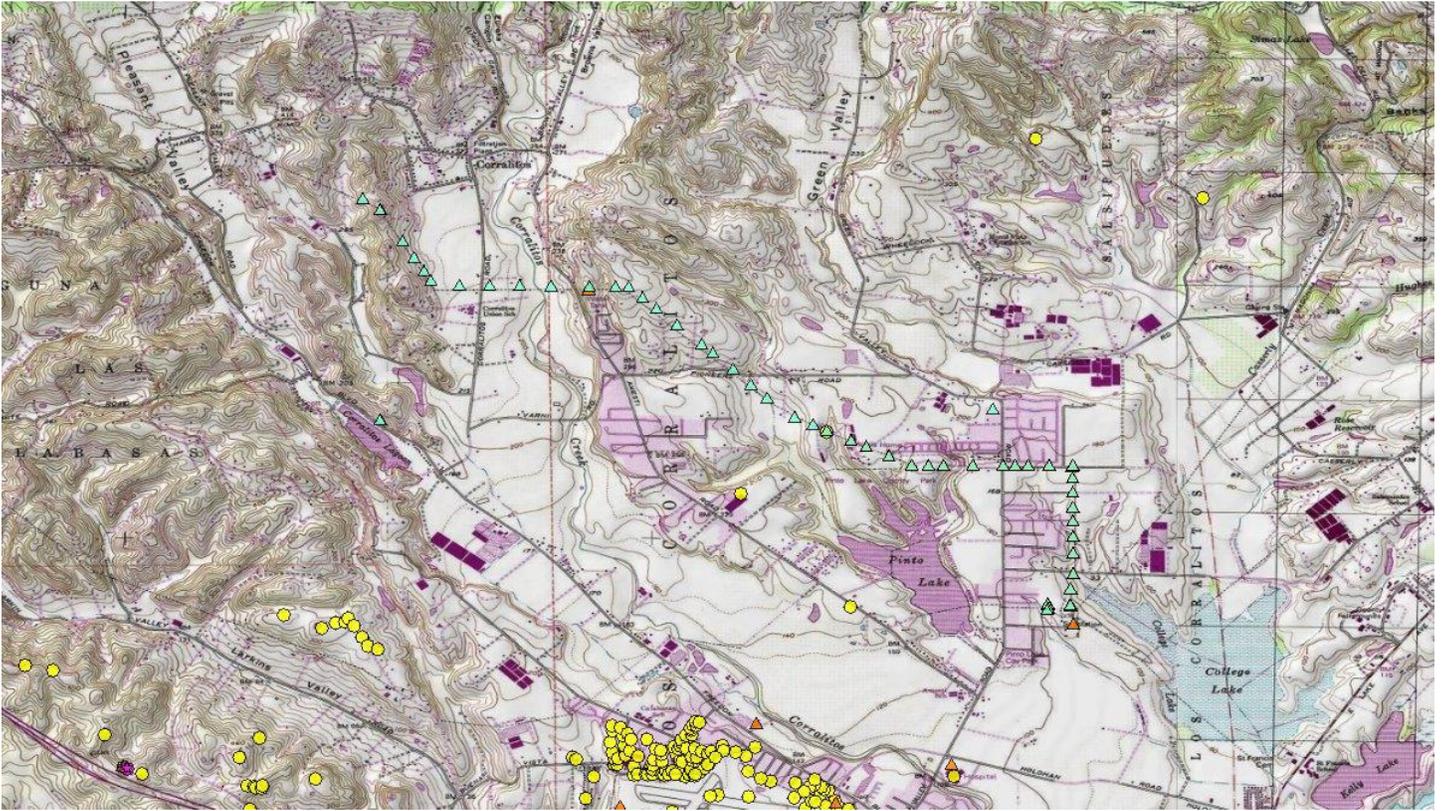
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6990-OE

PROPOSEING TO INSTALL 49 OF 55 POLES FOR 115 kV REINFORCEMENT PROJECT

Verified Map for ASN 2013-AWP-6990-OE





Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6990-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr 4/45
 Location: WATSONVILLE, CA
 Latitude: 36-58-49.44N NAD 83
 Longitude: 121-48-41.36W
 Heights: 317 feet site elevation (SE)
 90 feet above ground level (AGL)
 407 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6990-OE.

Signature Control No: 201107597-205349669

(DNE)

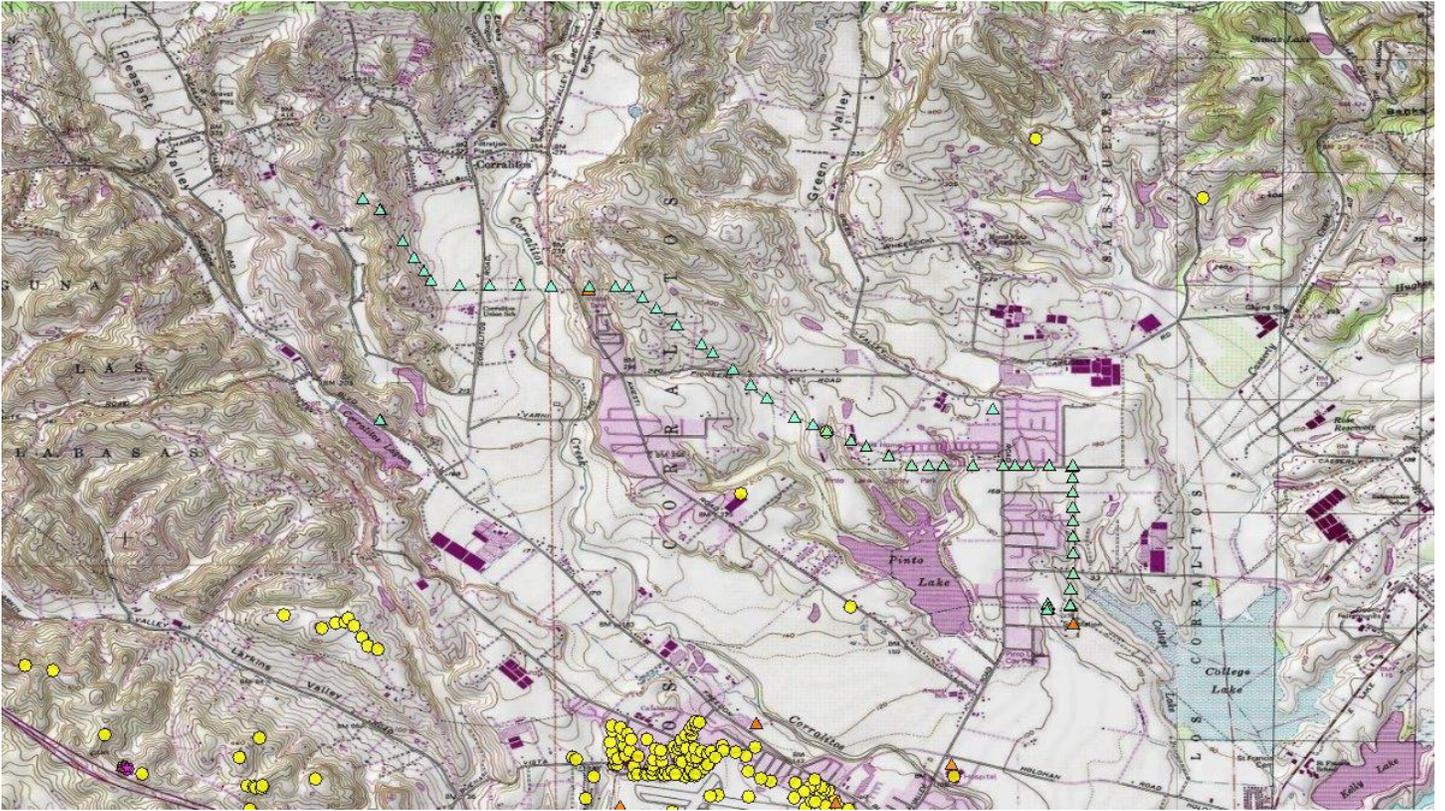
Karen McDonald
Specialist

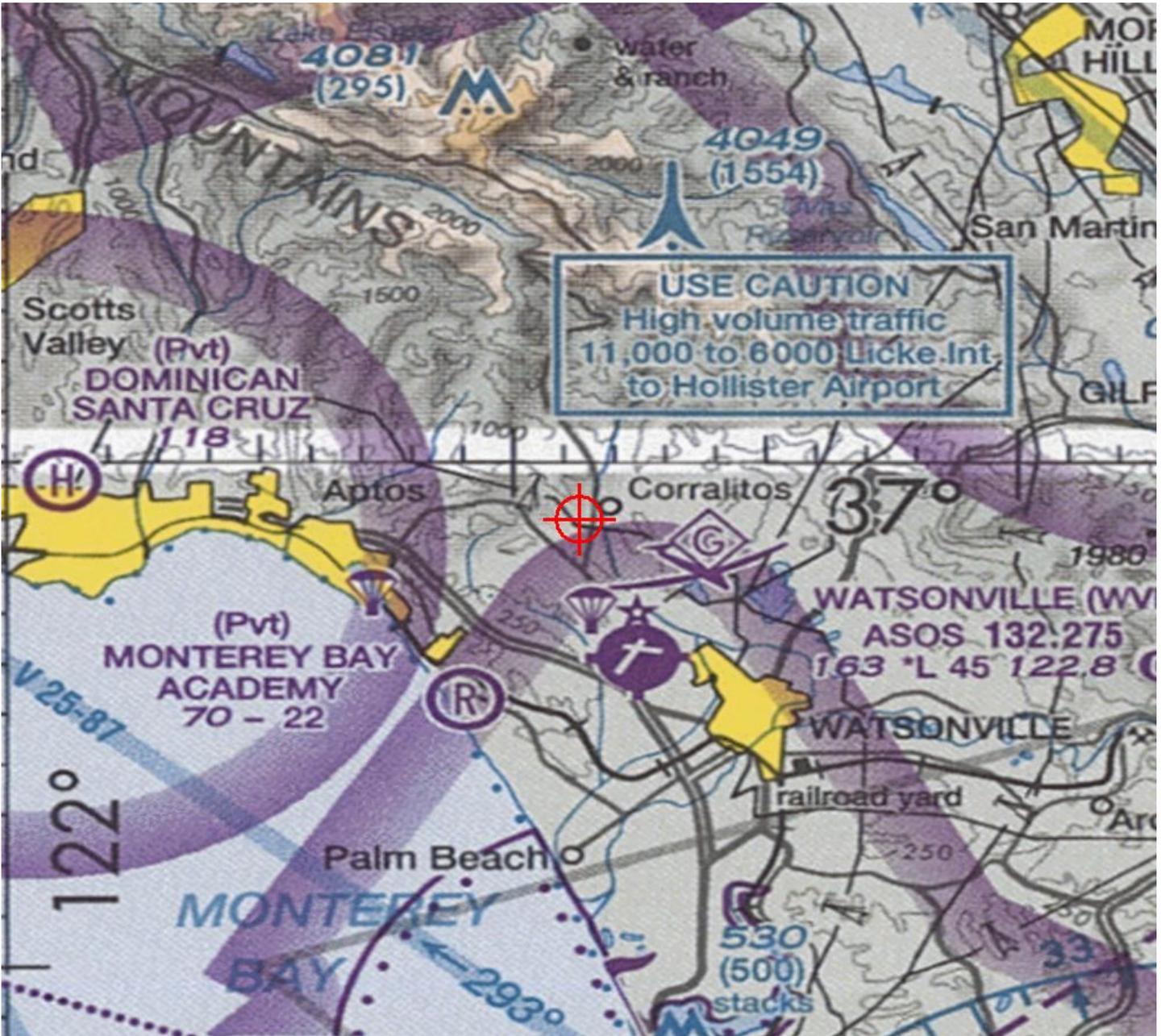
Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6990-OE

PROPOSEING TO INSTALL 49 OF 55 POLES FOR 115 kV REINFORCEMENT PROJECT

Verified Map for ASN 2013-AWP-6990-OE







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6991-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr 4/46
 Location: WATSONVILLE, CA
 Latitude: 36-58-54.07N NAD 83
 Longitude: 121-48-44.64W
 Heights: 343 feet site elevation (SE)
 95 feet above ground level (AGL)
 438 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6991-OE.

Signature Control No: 201107599-205349670

(DNE)

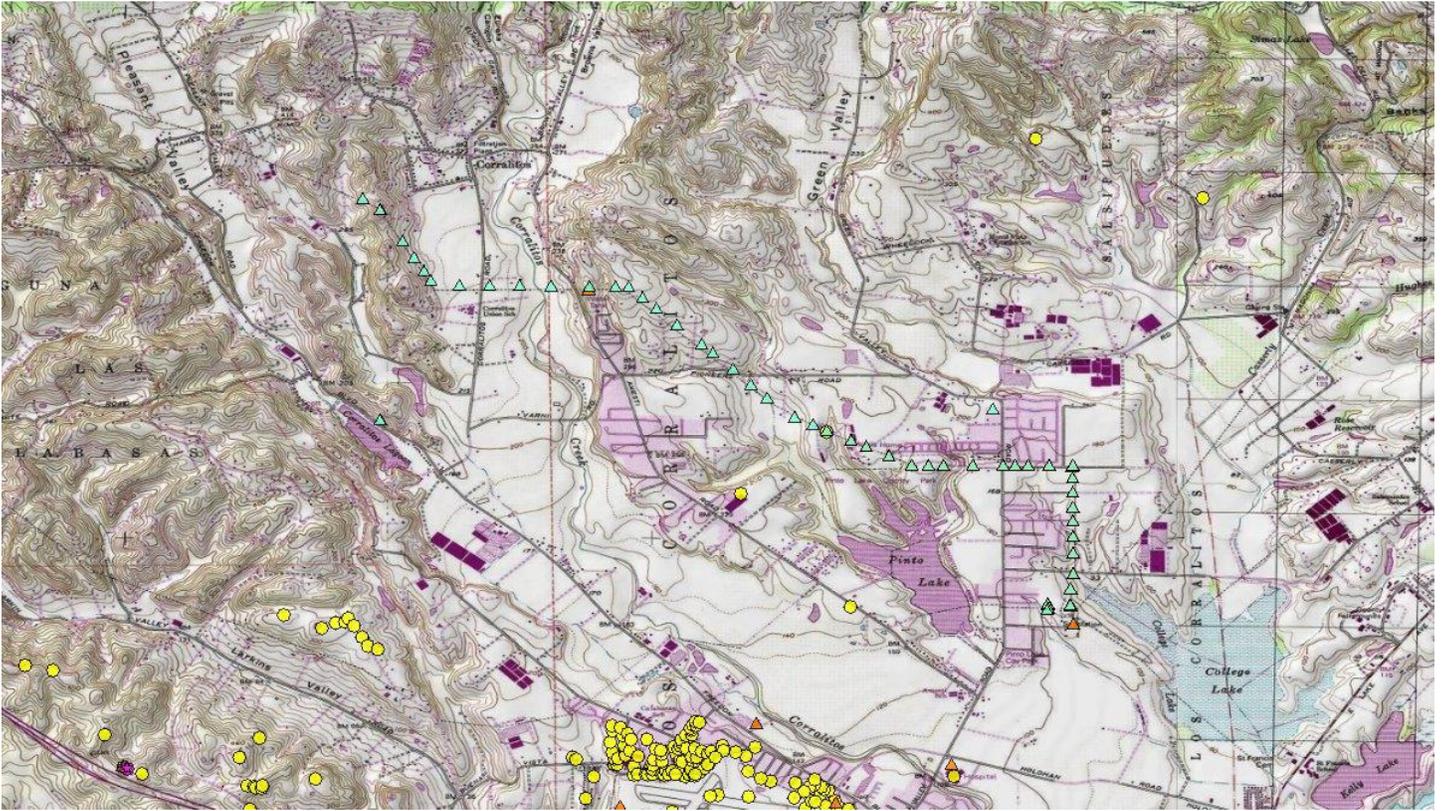
Karen McDonald
Specialist

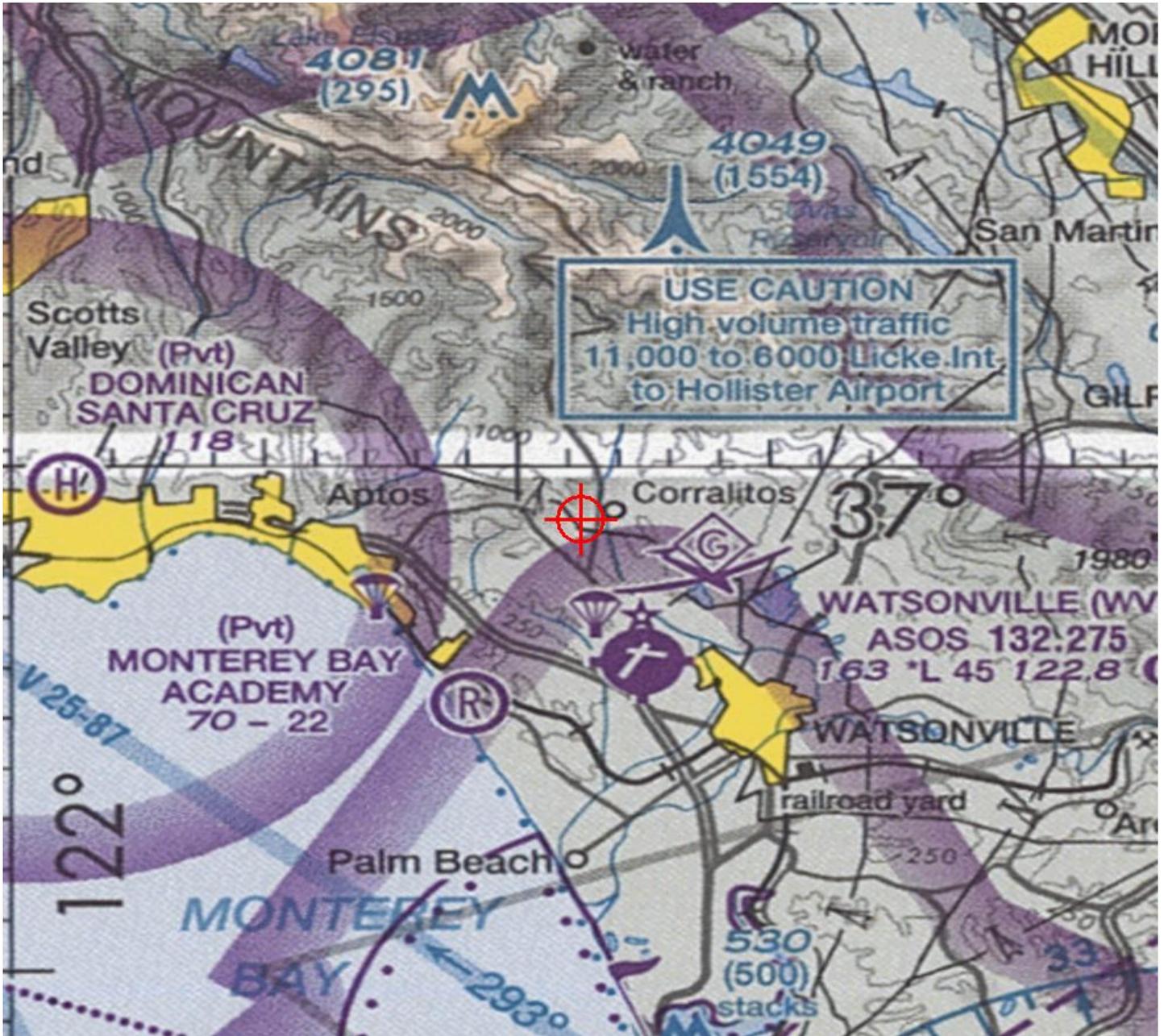
Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6991-OE

PROPOSEING TO INSTALL 50 OF 55 POLES FOR 115 kV REINFORCEMENT PROJECT

Verified Map for ASN 2013-AWP-6991-OE







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6992-OE

*I will delete this + file
 with correct coordinates.*

Issued Date: 02/27/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr 4/47
 Location: WATSONVILLE, CA
 Latitude: 36-58-03.01N NAD 83
 Longitude: 121-48-51.10W
 Heights: 477 feet site elevation (SE)
 85 feet above ground level (AGL)
 562 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does exceed obstruction standards but would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, Obstruction Marking and Lighting, red lights - Chapters 4,5(Red),&12.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

This determination expires on 08/27/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6992-OE.

Signature Control No: 201107600-209279838

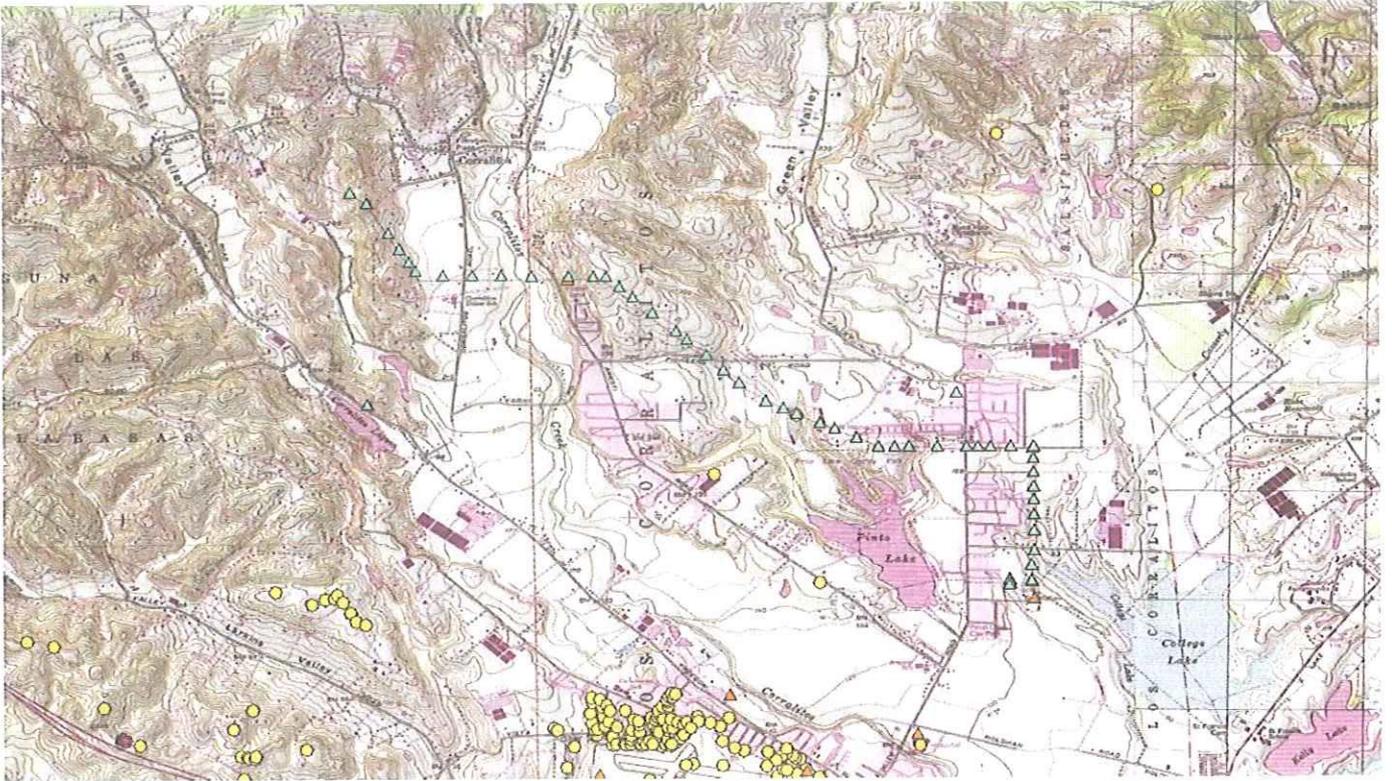
(EBO)

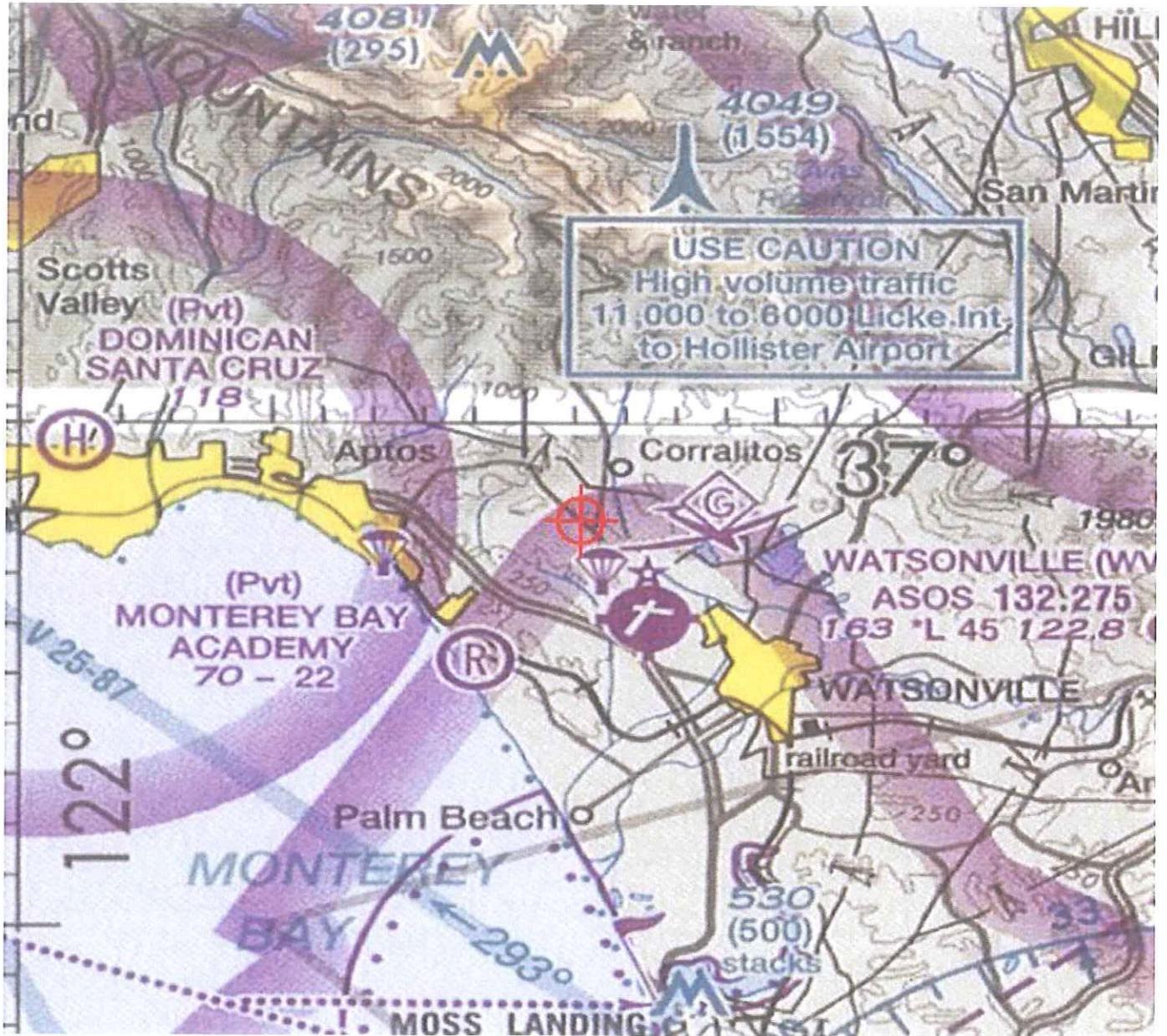
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6992-OE

PROPOSEING TO INSTALL 51 OF 55 POLES FOR 115 kV REINFORCEMENT PROJECT







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6993-OE

*I will delete this
 no tower at these
 coordinates.*

Issued Date: 02/27/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr #2 4/48
 Location: WATSONVILLE, CA
 Latitude: 36-58-03.12N NAD 83
 Longitude: 121-48-50.93W
 Heights: 477 feet site elevation (SE)
 85 feet above ground level (AGL)
 562 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does exceed obstruction standards but would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure is marked/lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, Obstruction Marking and Lighting, red lights - Chapters 4,5(Red),&12.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

This determination expires on 08/27/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6993-OE.

Signature Control No: 201107601-209279837

(EBO)

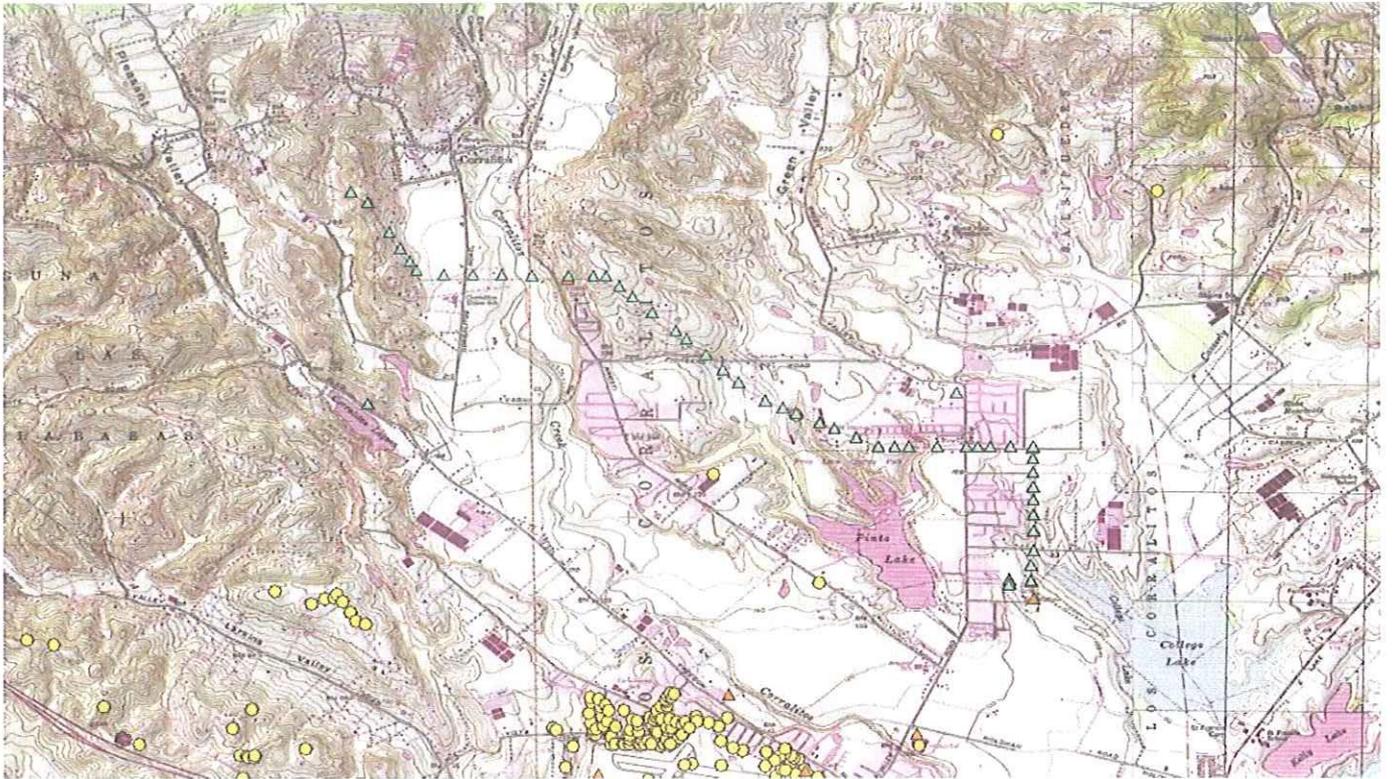
Karen McDonald
Specialist

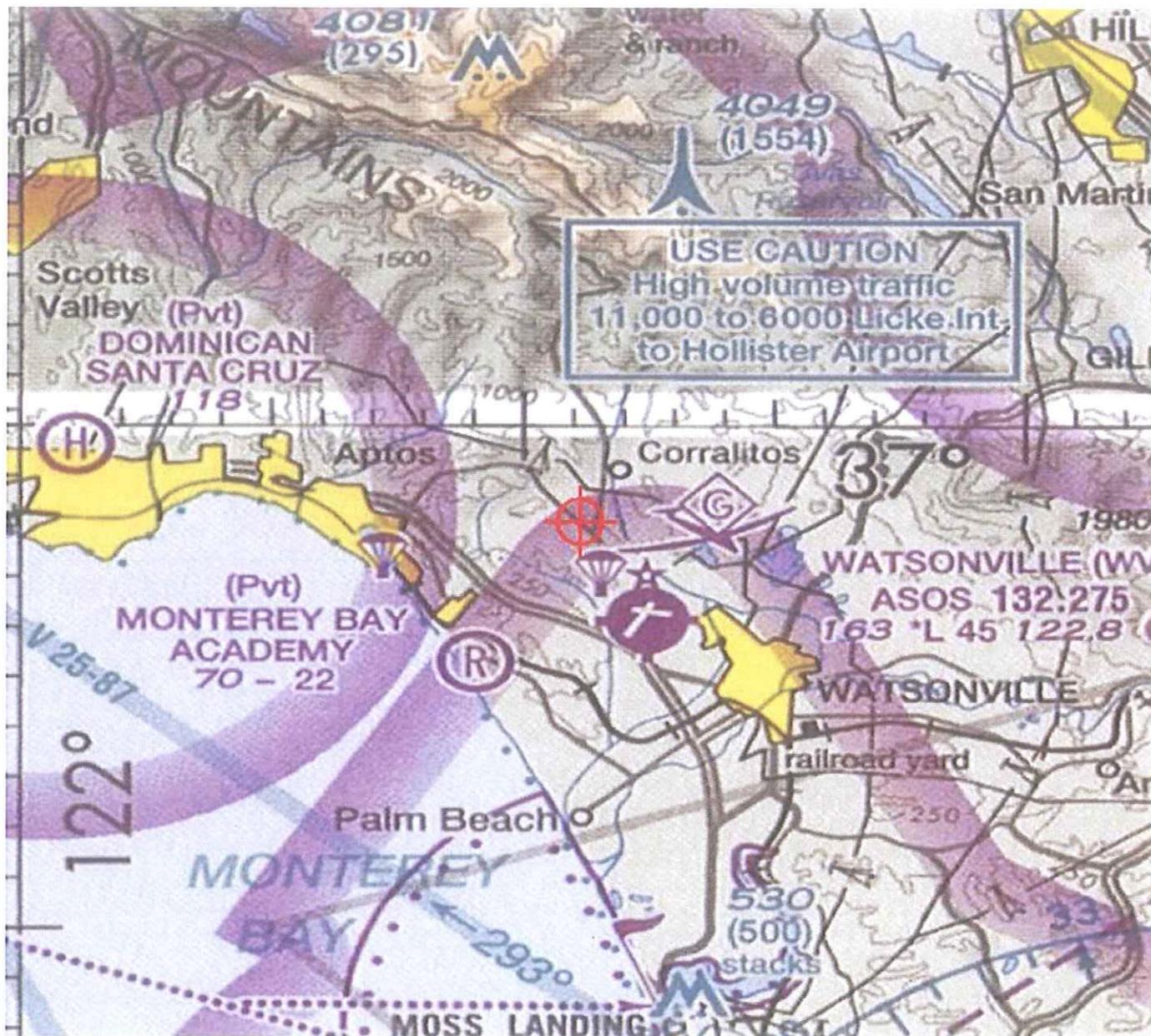
Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6993-OE

PROPOSEING TO INSTALL 52 OF 55 POLES FOR 115 kV REINFORCEMENT PROJECT

Verified Map for ASN 2013-AWP-6993-OE







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76137

Aeronautical Study No.
 2013-AWP-6994-OE

Issued Date: 11/21/2013

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr ~~448~~ *GV-RR #2 4148*
 Location: WATSONVILLE, CA
 Latitude: 36-59-03.01N NAD 83
 Longitude: 121-48-51.10W
 Heights: 477 feet site elevation (SE)
 85 feet above ground level (AGL)
 562 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 05/21/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6994-OE.

Signature Control No: 201107602-202224824

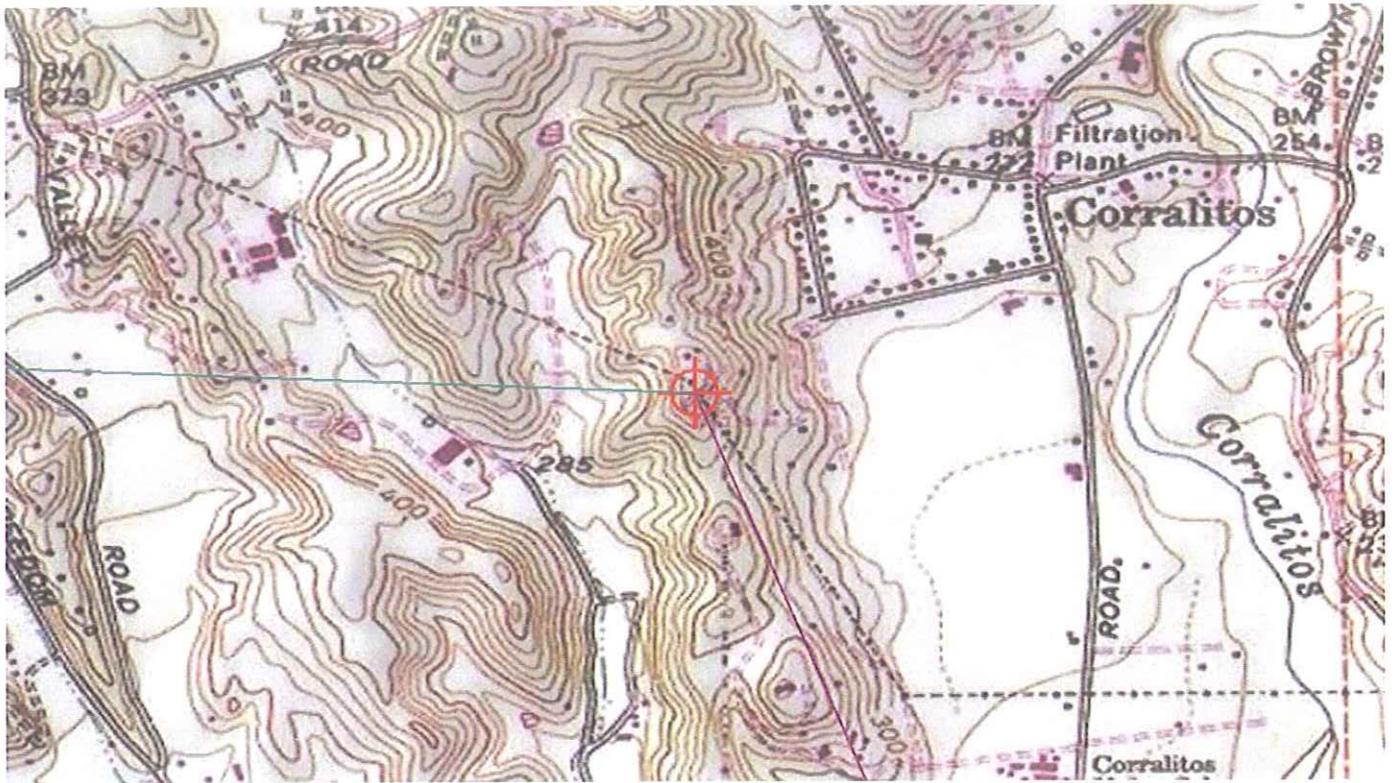
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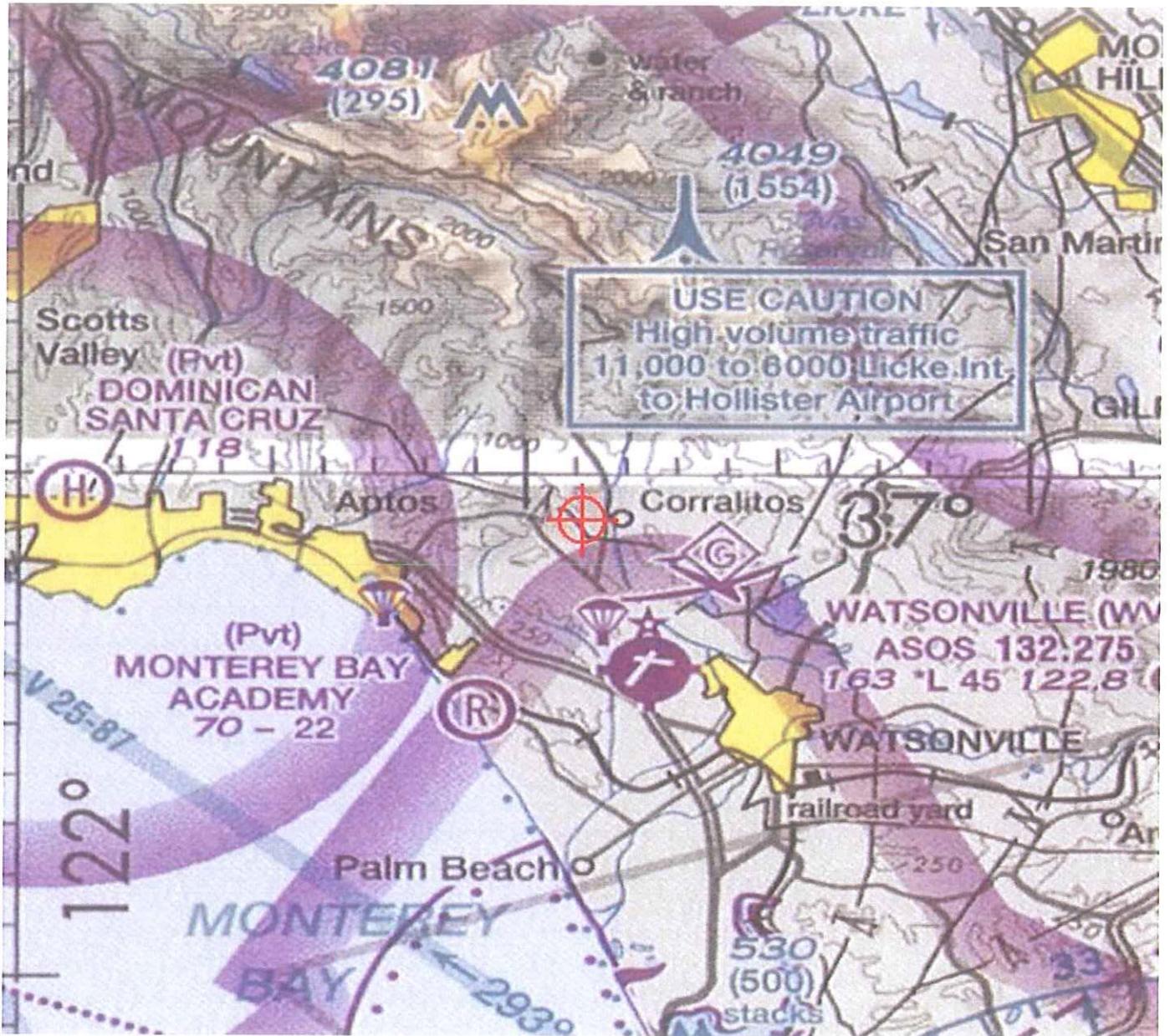
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6994-OE

PROPOSEING TO INSTALL 53 OF 55 POLES FOR 115 kV REINFORCEMENT PROJECT







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76137

Aeronautical Study No.
 2013-AWP-6994-OE

Issued Date: 11/21/2013

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr ~~448~~ *GV-RR #2 4148*
 Location: WATSONVILLE, CA
 Latitude: 36-59-03.01N NAD 83
 Longitude: 121-48-51.10W
 Heights: 477 feet site elevation (SE)
 85 feet above ground level (AGL)
 562 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 05/21/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6994-OE.

Signature Control No: 201107602-202224824

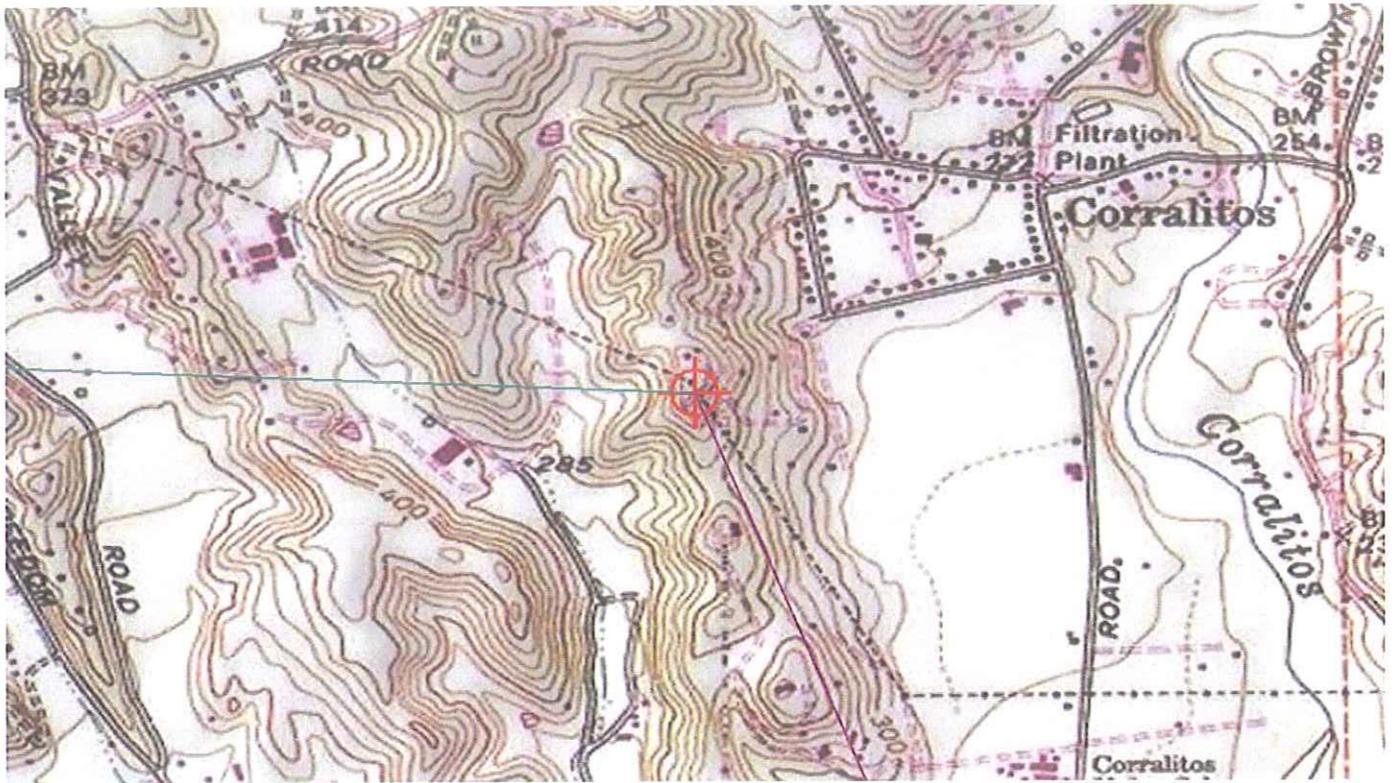
(DNE)

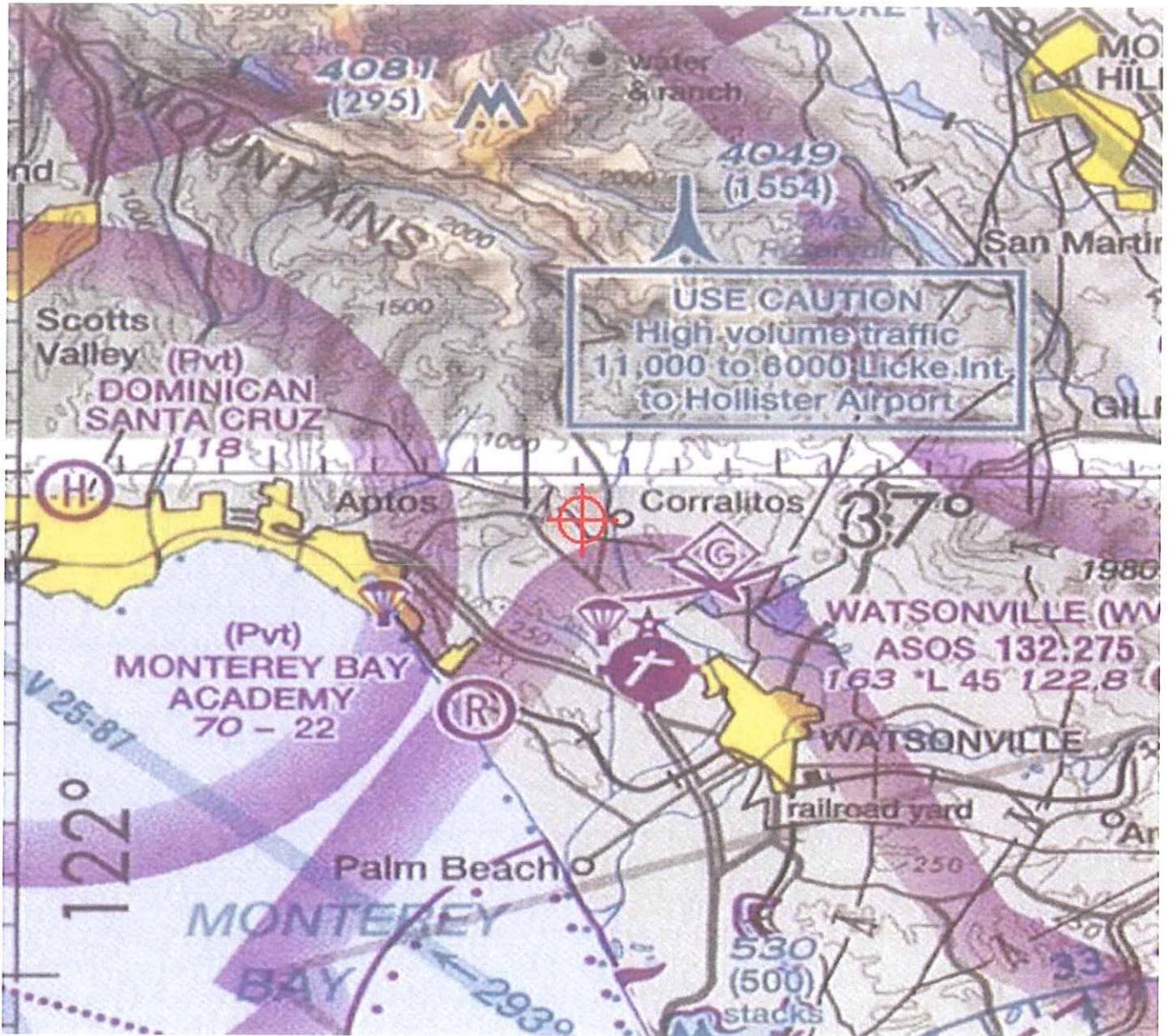
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6994-OE

PROPOSEING TO INSTALL 53 OF 55 POLES FOR 115 kV REINFORCEMENT PROJECT







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76137

Aeronautical Study No.
 2013-AWP-6995-OE

Issued Date: 11/21/2013

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr ~~4/49~~ 4148
 Location: WATSONVILLE, CA
 Latitude: 36-59-03.12N NAD 83
 Longitude: 121-48-50.93W
 Heights: 477 feet site elevation (SE)
 85 feet above ground level (AGL)
 562 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 05/21/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6995-OE.

Signature Control No: 201107603-202238998

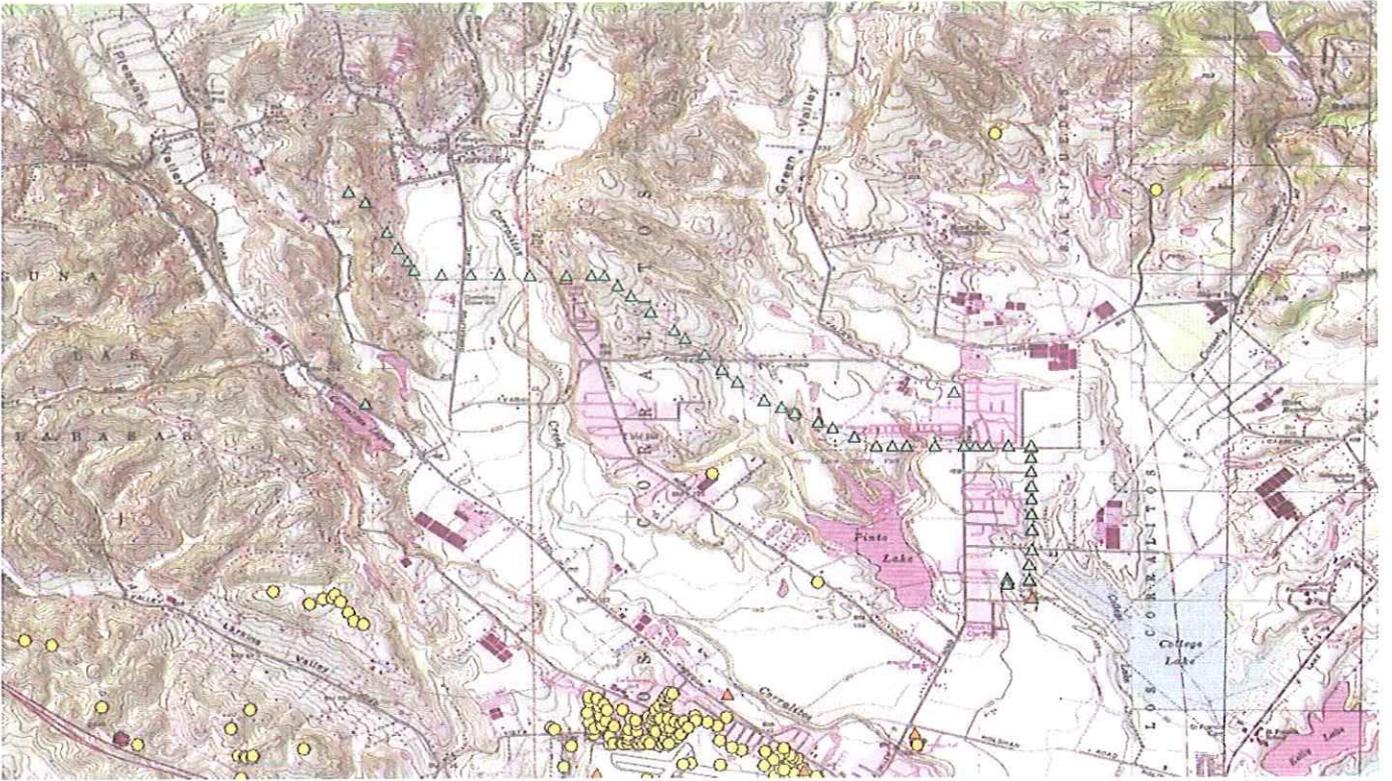
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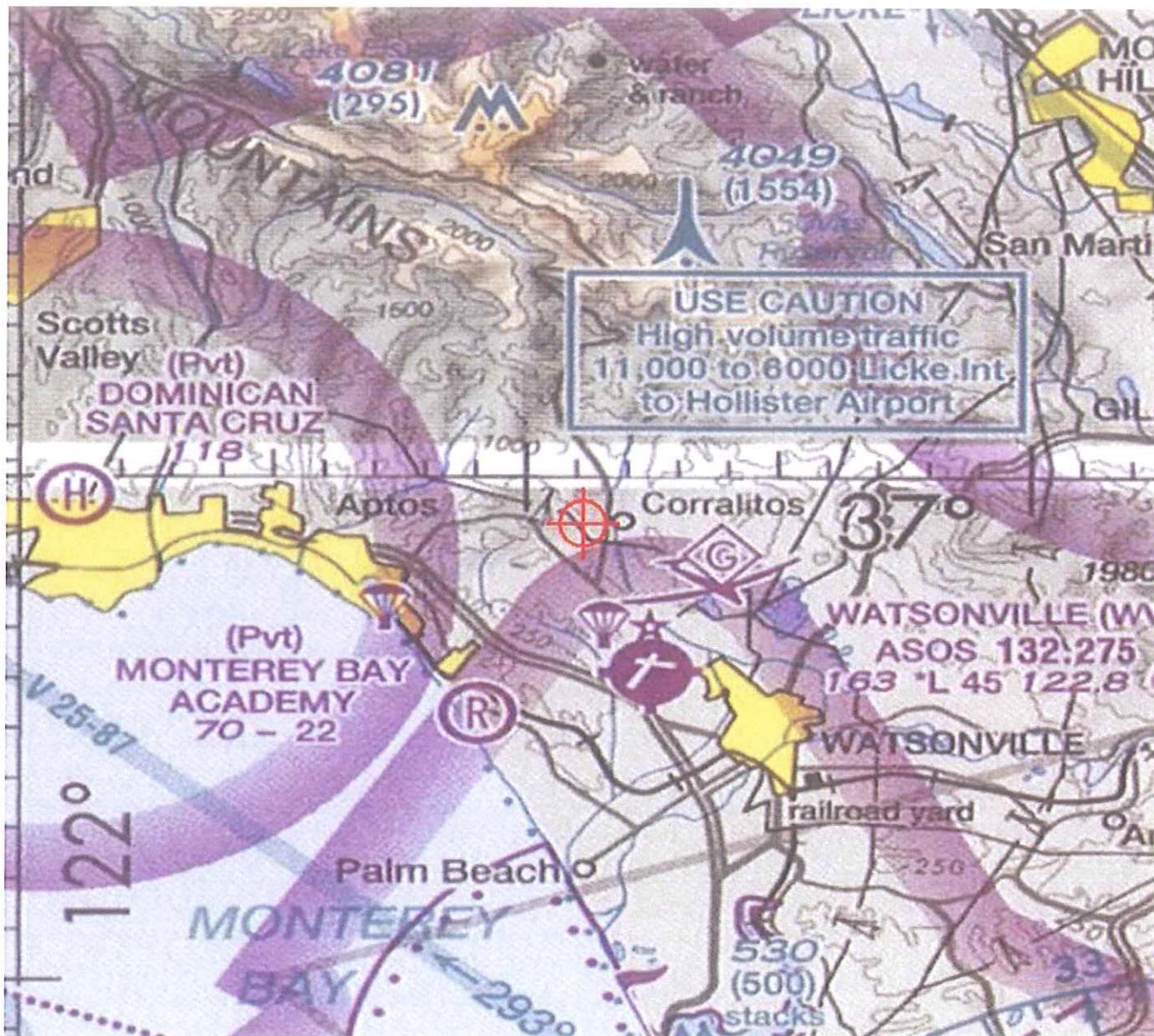
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6995-OE

PROPOSEING TO INSTALL 54 OF 55 POLES FOR 115 kV REINFORCEMENT PROJECT







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76137

Aeronautical Study No.
 2013-AWP-6995-OE

Issued Date: 11/21/2013

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr ~~4/49~~ 4148
 Location: WATSONVILLE, CA
 Latitude: 36-59-03.12N NAD 83
 Longitude: 121-48-50.93W
 Heights: 477 feet site elevation (SE)
 85 feet above ground level (AGL)
 562 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 05/21/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6995-OE.

Signature Control No: 201107603-202238998

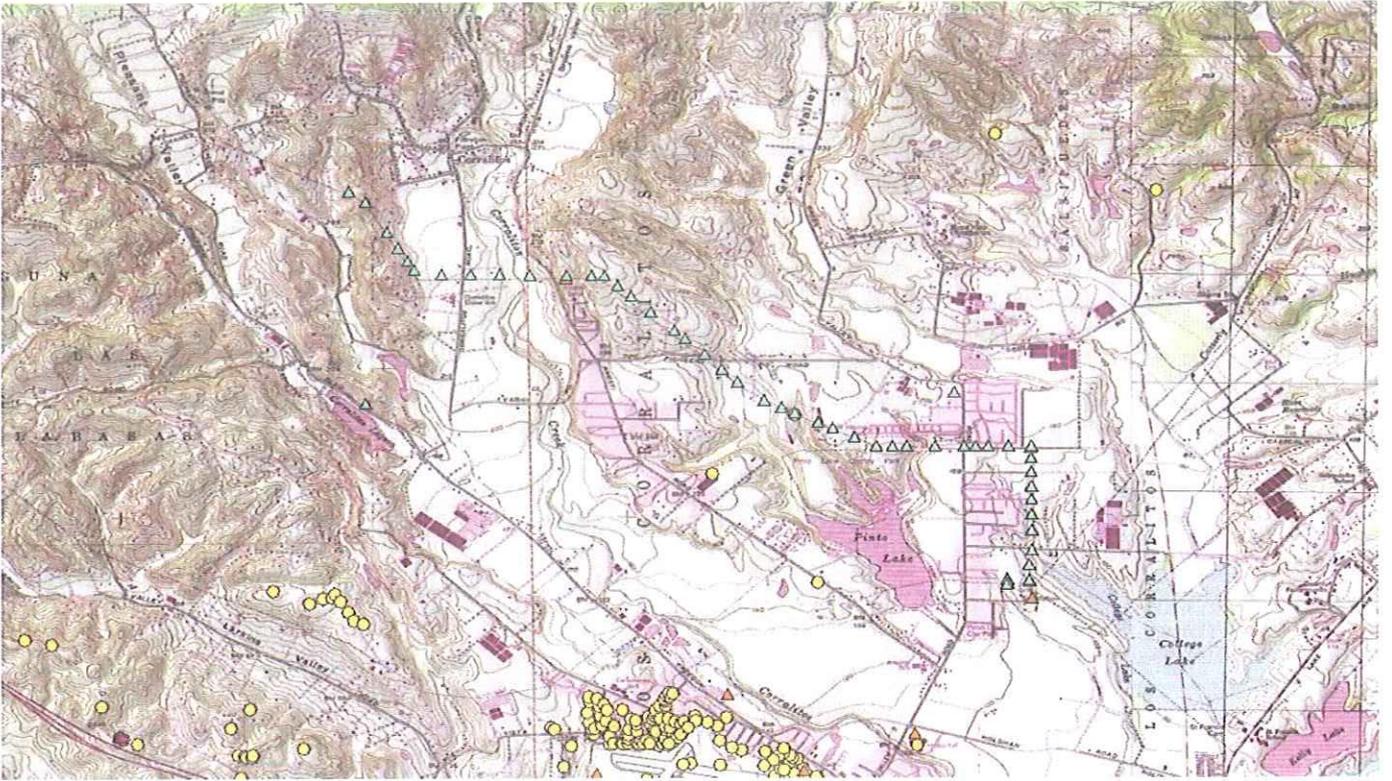
(DNE)

Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6995-OE

PROPOSEING TO INSTALL 54 OF 55 POLES FOR 115 kV REINFORCEMENT PROJECT





Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76137

Aeronautical Study No.
 2013-AWP-6996-OE

Issued Date: 11/21/2013

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr 4/50 4/49
 Location: WATSONVILLE, CA
 Latitude: 36-59-06.27N NAD 83
 Longitude: 121-48-56.03W
 Heights: 439 feet site elevation (SE)
 85 feet above ground level (AGL)
 524 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 05/21/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

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If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6996-OE.

Signature Control No: 201107604-202224823

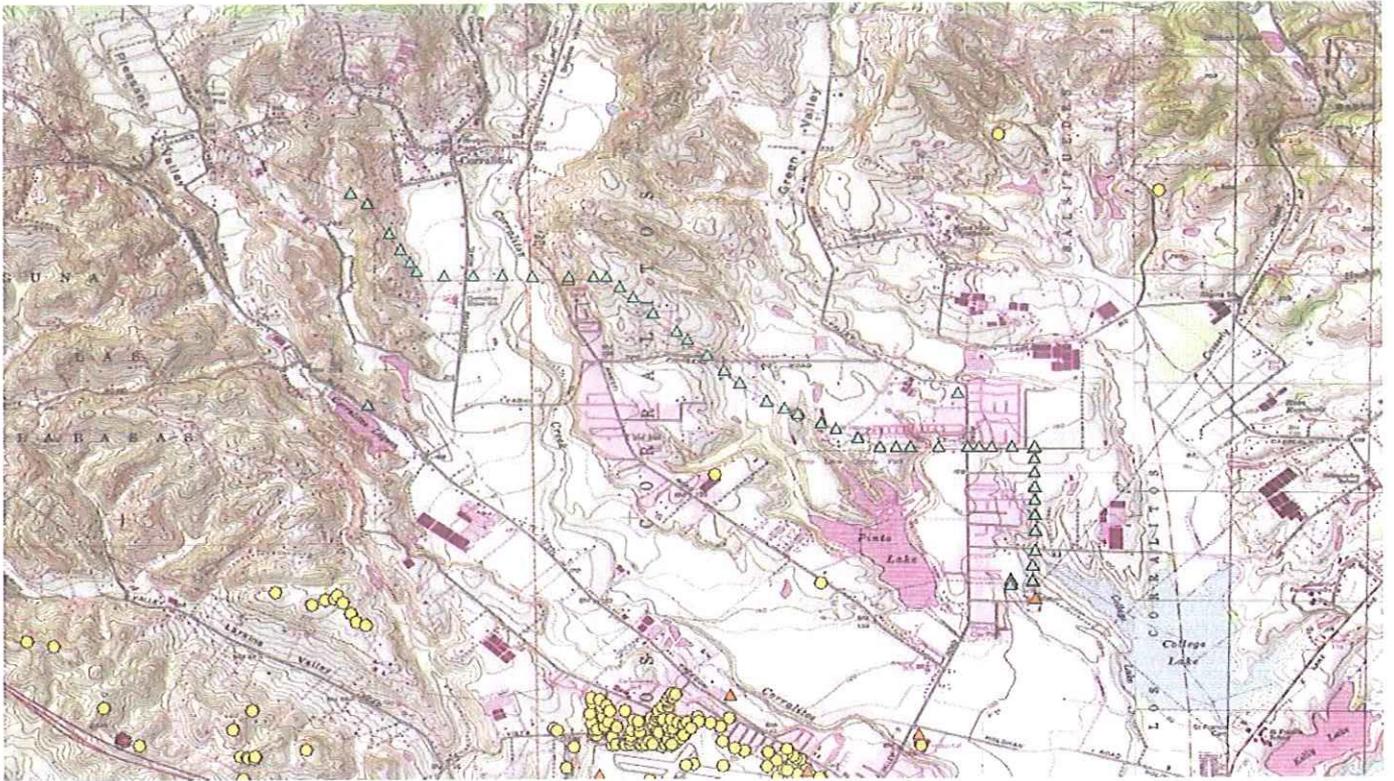
(DNE)

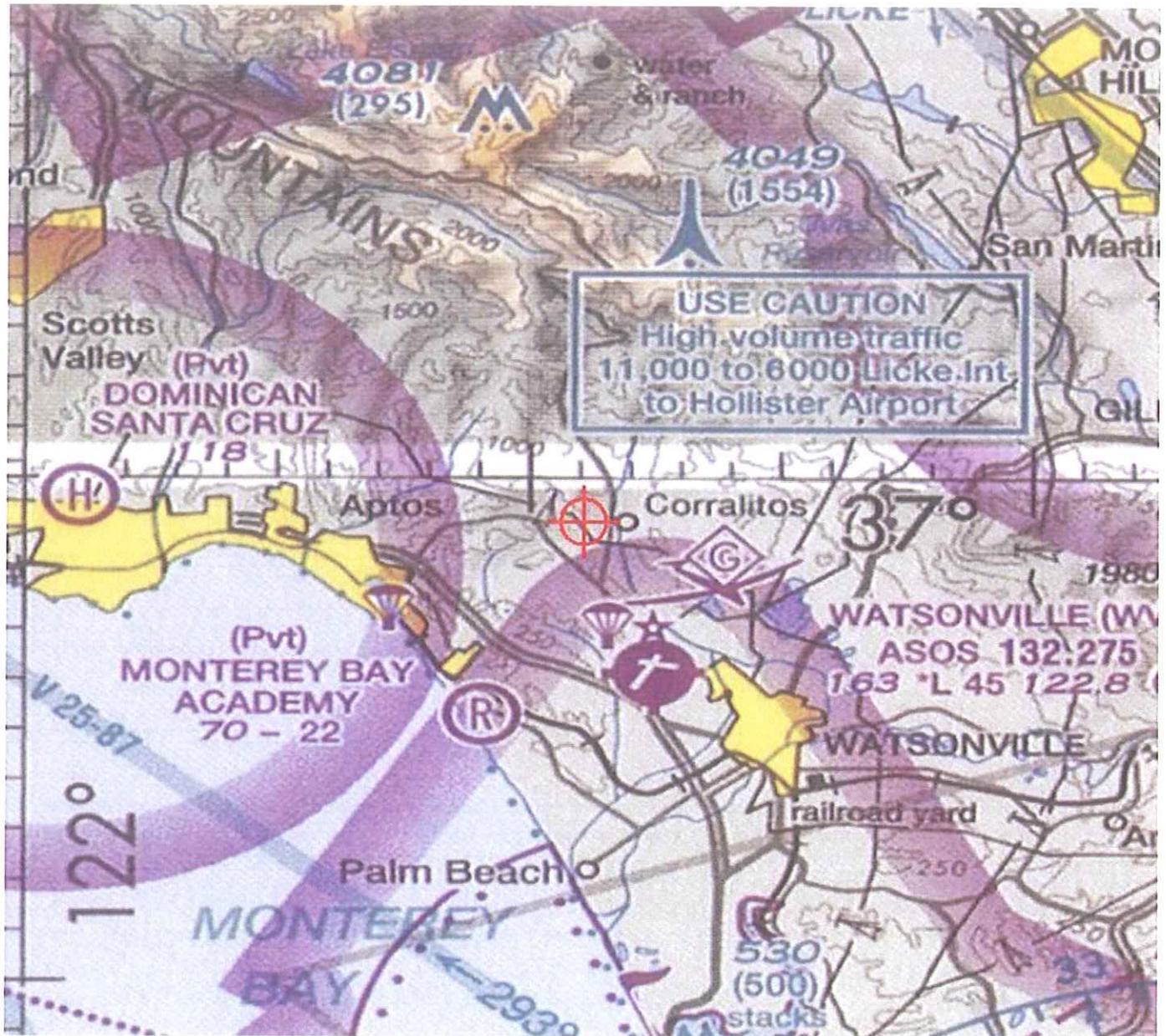
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6996-OE

PROPOSEING TO INSTALL 55 OF 55 POLES FOR 115 kV REINFORCEMENT PROJECT







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76137

Aeronautical Study No.
 2013-AWP-6996-OE

Issued Date: 11/21/2013

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr 4/50 4/49
 Location: WATSONVILLE, CA
 Latitude: 36-59-06.27N NAD 83
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 Heights: 439 feet site elevation (SE)
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This determination expires on 05/21/2015 unless:

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NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6996-OE.

Signature Control No: 201107604-202224823

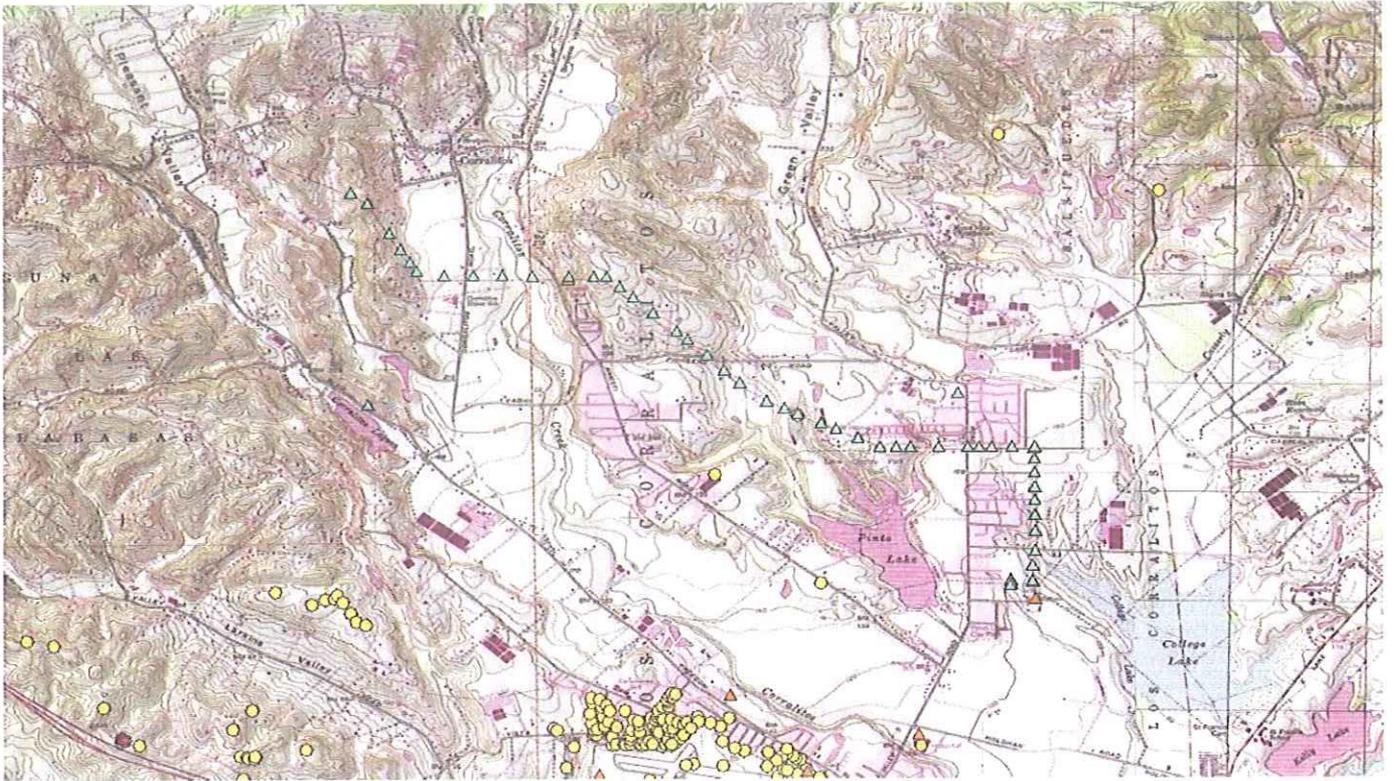
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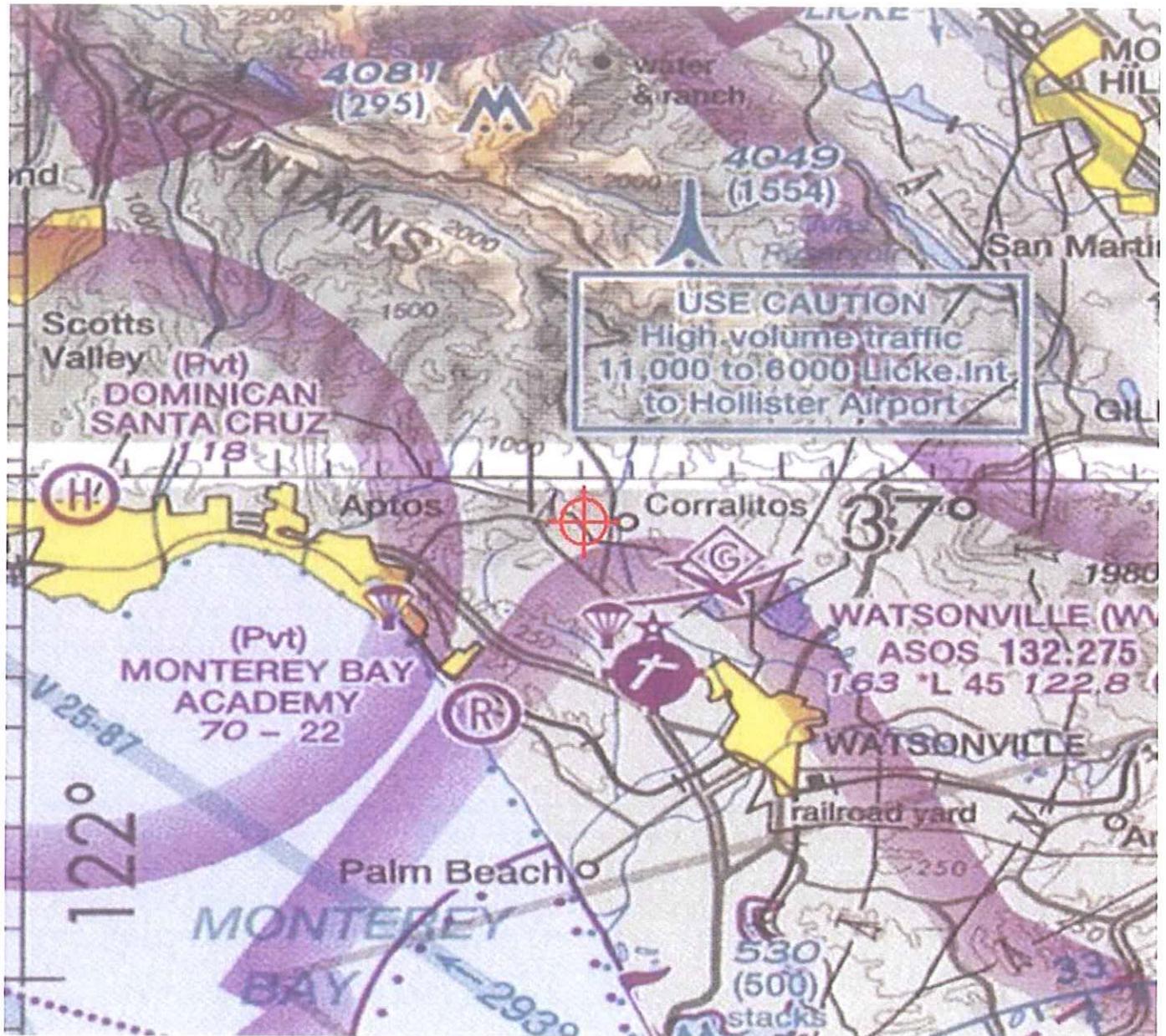
Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6996-OE

PROPOSEING TO INSTALL 55 OF 55 POLES FOR 115 kV REINFORCEMENT PROJECT







Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2013-AWP-6997-OE

Issued Date: 01/13/2014

FCC License Desk
 Pacific Gas and Electric Company
 487 West Shaw Ave, Bldg. B
 Fresno, CA 93704

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole Tx Twr 1/22
 Location: WATSONVILLE, CA
 Latitude: 36-57-55.41N NAD 83
 Longitude: 121-46-32.18W
 Heights: 194 feet site elevation (SE)
 90 feet above ground level (AGL)
 284 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 07/13/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

If we can be of further assistance, please contact our office at (310) 725-6557. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-AWP-6997-OE.

Signature Control No: 201107605-205349671

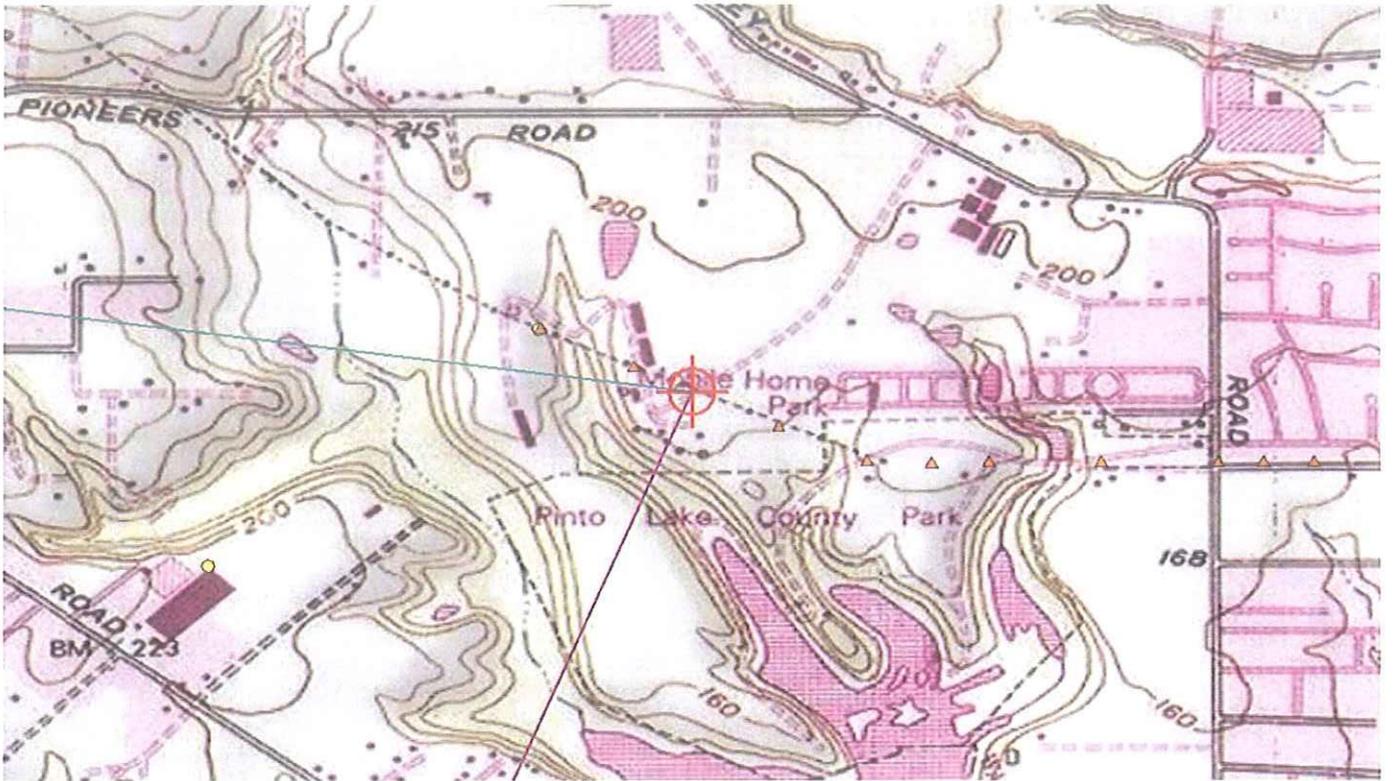
(DNE)

Karen McDonald
Specialist

Attachment(s)
Case Description
Map(s)

Case Description for ASN 2013-AWP-6997-OE

PROPOSEING TO INSTALL 26 OF 55 POLES FOR 115 kV REINFORCEMENT PROJECT





Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 2601 Meacham Boulevard
 Fort Worth, TX 76193

Aeronautical Study No.
 2014-AWP-3839-OE

Issued Date: 06/17/2014

Environmental Management
 Pacific Gas and Electric
 3401 Crow Canyon
 San Ramon, CA 94956

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole 4/47
 Location: Watsonville, CA
 Latitude: 36-58-58.77N NAD 83
 Longitude: 121-48-47.97W
 Heights: 407 feet site elevation (SE)
 95 feet above ground level (AGL)
 502 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 12/17/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

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Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

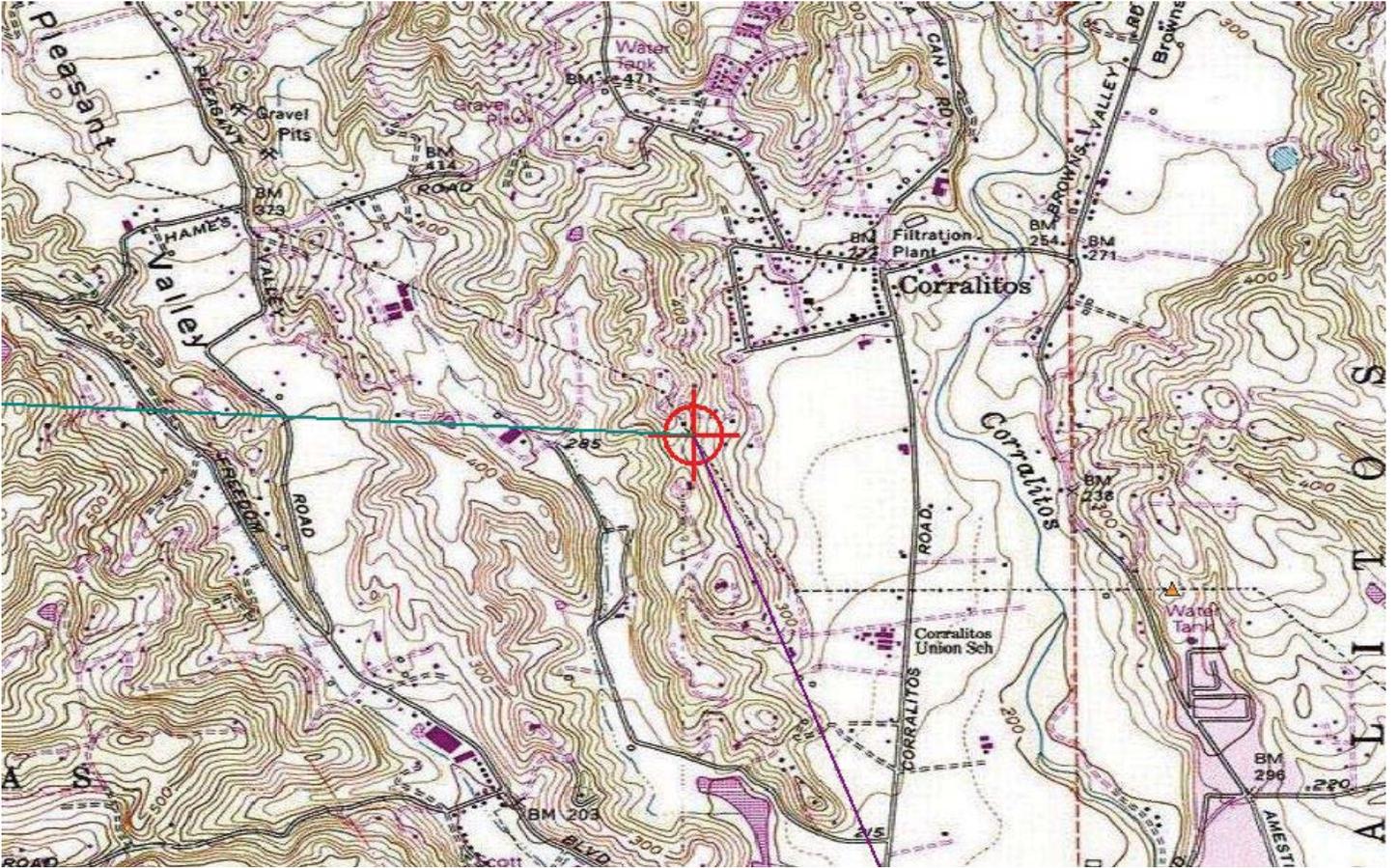
If we can be of further assistance, please contact our office at (310) 725-6558. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-AWP-3839-OE.

Signature Control No: 219663823-221257866

(DNE)

LaDonna James
Technician

Attachment(s)
Map(s)





Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
2601 Meacham Boulevard
Fort Worth, TX 76193

Aeronautical Study No.
2014-AWP-3840-OE

Issued Date: 06/17/2014

Environmental Management
Pacific Gas and Electric
3401 Crow Canyon
San Ramon, CA 94956

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Utility Pole 4/50
Location: Watsonville, CA
Latitude: 36-59-15.45N NAD 83
Longitude: 121-49-10.37W
Heights: 510 feet site elevation (SE)
80 feet above ground level (AGL)
590 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
 Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination expires on 12/17/2015 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

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If we can be of further assistance, please contact our office at (310) 725-6558. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2014-AWP-3840-OE.

Signature Control No: 219663929-221257876

(DNE)

LaDonna James
Technician

Attachment(s)
Map(s)

ATTACHMENT E: PRELIMINARY MAGNETIC FIELD MANAGEMENT PLAN

**PRELIMINARY MAGNETIC FIELD MANAGEMENT PLAN
AND SUBSTATION CHECKLIST
SANTA CRUZ REINFORCEMENT PROJECT**

A. Power Line EMF Field Management Plan

I. General Description of Project

Project Lead: Project Manager, Electric Transmission Maintenance and Construction

Transmission Lines: Green Valley - Camp Evers 115 kV line.
Green Valley - Rob Roy 115 kV line.

Distribution line underbuild: 21 kV.

Scope of Work:

This project proposes to install a new 115 kV circuit between Green Valley Substation and Rob Roy Substation by rebuilding the existing Green Valley to Camp Evers 115 kV single-circuit line and making it a double-circuit 115 kV line for 7.2 miles. A new, approximately 1.7-mile-long single-circuit 115 kV power line connecting the Green Valley-Camp Evers 115 kV Power Line to Rob Roy Substation will be constructed in an existing distribution line alignment by installing new poles and collocating some existing distribution facilities.

PRELIMINARY MAGNETIC FIELD MANAGEMENT PLAN AND SUBSTATION CHECKLIST SANTA CRUZ REINFORCEMENT PROJECT

II. BACKGROUND: CPUC EMF POLICY

On January 15, 1991, the CPUC initiated an investigation to consider its role in mitigating the health effects, if any, of electric and magnetic fields from utility facilities and power lines. A working group of interested parties, called the California EMF Consensus Group, was created by the CPUC to advise it on this issue. It consisted of 17 stakeholders representing citizens groups, consumer groups, environmental groups, state agencies, unions, and utilities. The Consensus Group's fact-finding process was open to the public, and its report incorporated concerns expressed by the public. Its recommendations were filed with the Commission in March 1992.

In August 2004, the CPUC began a proceeding known as a “rulemaking” (R.04-08-020) to explore whether changes should be made to existing CPUC policies and rules concerning EMF from electric transmission lines and other utility facilities.

Through a series of hearings and conferences, the Commission evaluated the results of its existing EMF mitigation policies and addressed possible improvements in implementation of these policies. The CPUC also explored whether new policies were warranted in light of then-recent scientific findings on the possible health effects of EMF exposure.

The CPUC completed the EMF rulemaking in January 2006 and presented the following conclusions in Decision D.06-01-042:

- The CPUC affirmed its existing policy of requiring no-cost and low-cost mitigation measures to reduce EMF levels from new utility transmission lines and substation projects.
- The CPUC adopted rules and policies to improve utility design guidelines for reducing EMF, and provided for a utility workshop to implement these policies and to standardize design guidelines.
- Despite numerous studies, including one ordered by the Commission and conducted by the California Department of Health Services, the CPUC stated “we are unable to determine whether there is a significant scientifically verifiable relationship between EMF exposure and negative health consequences.”
- The CPUC said it will “remain vigilant” regarding new scientific studies on EMF, and if these studies indicate negative EMF health impacts, the Commission will reconsider its EMF policies and open a new rulemaking if necessary.

In response to a situation of scientific uncertainty and public concern, the decision specifically requires PG&E to consider “no-cost” and “low-cost” measures, where feasible, to reduce exposure from new or upgraded utility facilities. It directs that no-cost mitigation measures be undertaken, and that low-cost options, when they meet certain guidelines for field reduction and cost, be adopted through the project certification process. PG&E was directed to develop, submit

PRELIMINARY MAGNETIC FIELD MANAGEMENT PLAN AND SUBSTATION CHECKLIST SANTA CRUZ REINFORCEMENT PROJECT

and follow EMF guidelines to implement the CPUC decision. Four percent of total project budgeted cost is the benchmark in implementing EMF mitigation, and mitigation measures should achieve incremental magnetic field reductions of at least 15%.

III. ELECTRIC AND MAGNETIC FIELDS (EMF)

EMF is a term used to describe electric and magnetic fields that are created by electric voltage (electric field) and electric current (magnetic field). Power frequency EMF is a natural consequence of electrical circuits, and can be either directly measured using the appropriate measuring instruments or calculated using appropriate information.

Electric fields are present whenever voltage exists on a wire, and are not dependent on current. The magnitude of the electric field is primarily a function of the configuration and operating voltage of the line and decreases with the distance from the source (line). The electric field can be shielded (i.e., the strength can be reduced) by any conducting surface, such as trees, fences, walls, buildings, and most types of structures. The strength of an electric field is measured in volts per meter (V/m) or kilovolts per meter (kV/m).

Magnetic fields are present whenever current flows in a conductor, and are not dependent on the voltage of the conductor. The strength of these fields also decreases with distance from the source. However, unlike electric fields, most common materials have little shielding effect on magnetic fields.

The magnetic field strength is a function of both the current on the conductor and the design of the system. Magnetic fields are measured in units called Gauss. However, for the low levels normally encountered near electric utility facilities, the field strength is expressed in a much smaller unit, the milliGauss (mG), which is one thousandth of a Gauss.

Power frequency EMF are present wherever electricity is used. This includes not only utility transmission lines, distribution lines, and substations, but also the building wiring in homes, offices, and schools, and in the appliances and machinery used in these locations. Magnetic field intensities from these sources can range from below 1 mG to above 1,000 mG (1 Gauss).

Magnetic field strengths diminish with distance. Fields from compact sources (i.e., those containing coils such as small appliances and transformers) drop off with distance “r” from the source by a factor of $1/r^3$. For three-phase power lines with balanced currents, the magnetic field strength drops off at a rate of $1/r^2$. Fields from unbalanced currents, which flow in paths such as neutral or ground conductors, diminish in an inverse proportion to the distance from the source, $1/r$. Conductor spacing and configuration also affect the rate at which the magnetic field strength decreases, as well as the presence of other sources of electricity. The magnetic field levels of PG&E’s power lines will vary with customer demand.

Magnetic field strengths for typical transmission power line loads at the edge of rights-of-way are approximately 10 to 90 mG.

PRELIMINARY MAGNETIC FIELD MANAGEMENT PLAN AND SUBSTATION CHECKLIST SANTA CRUZ REINFORCEMENT PROJECT

IV. No-Cost and Low-Cost Magnetic Field Mitigation

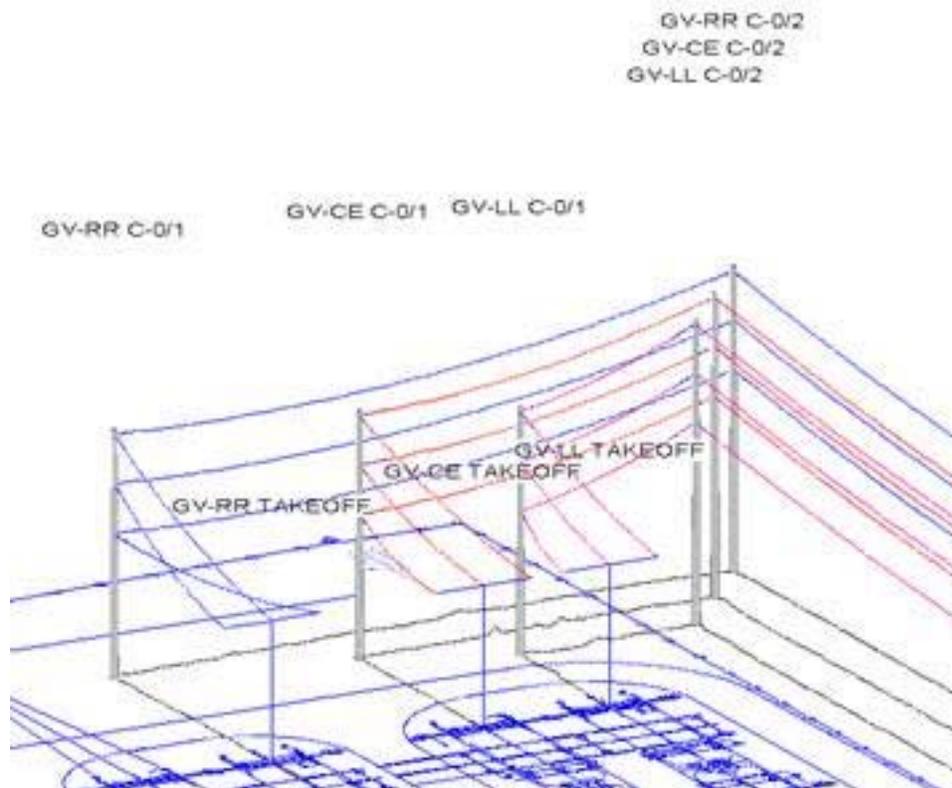
Optimally Phase Circuits:

The phases of the new Green Valley - Rob Roy 115 kV line and the existing Green Valley - Camp Evers 115 kV line will be arranged for minimum magnetic field level at the edge of the right of way.

The double circuit segment has a cross-phase arrangement as follows:

DOUBLE CIRCUIT SEGMENT	
LEFT CIRCUIT	RIGHT CIRCUIT
Green Valley - Rob Roy #2	Green Valley - Camp Evers
B - TOP	TOP - A
C - MID	MID - B
A - BOT	BOT - C

This is achieved with phasing for the GV-RR #2 line (blue circuit on left) leaving Green Valley as shown below:



**PRELIMINARY MAGNETIC FIELD MANAGEMENT PLAN
AND SUBSTATION CHECKLIST
SANTA CRUZ REINFORCEMENT PROJECT**

V. General Description of Surrounding Land Uses

Schools or Daycare: Three poles.

Residential: Fifty-nine poles.

Commercial/Industrial: Eight poles.

Recreational: Three poles.

Agricultural, Rural, and Undeveloped Land: Twenty-five poles.

Priority Areas where Low Cost Measures are to be Applied

The sixty-two poles in the school and residential land use areas are considered for magnetic field reduction.

LOCATION	STRUCTURE NUMBER
GRN VALLEY SS AGATE DRIVE LAPUS DRIVE	0/2 0/2A 0/3 0/3A 0/4
CUNNINGHAM WAY TREMBLY LANE	0/7 0/8 0/9
DALTON ROAD	0/13 0/14 0/15 0/16
KLIEWER LANE	TSP 22
PIONEER LANE DRIVEWAY	TSP 26
INDIAN CREEK LANE	28
PIONEER LANE	29 30
PIONEER VIEW	31 32
CROWE AVENUE	37
CORRALITOS RD DRIVEWAY	39
CORRALITOS SCHOOL	41
LIDDICOAT - HAZLETON PROPERTIES	42 43 44 45 46
ALDRIDGE LANE	47
HAMES HOLLOW	57
DAY VALLEY	58
QUAIL RUN	59
JINGLE LANE AREA	60 61
POTTER ROAD	62
PINE FOREST DRIVE	63
DOWNING DRIVE	64
COX ROAD	66 67 68 69 70 71 72 73
BUNKER ROAD	74
DAY VALLEY ROAD	75 76
MD DONALD ROAD	77 78 79 80 81 82 83
FREEDOM BLVD	84 85 86 87 88 89 90 91

**PRELIMINARY MAGNETIC FIELD MANAGEMENT PLAN
AND SUBSTATION CHECKLIST
SANTA CRUZ REINFORCEMENT PROJECT**

VI. Conclusion - Field Reduction Options Selected

The phases of the new Green Valley - Rob Roy 115 kV line and the existing Green Valley - Camp Evers 115 kV line will be arranged for minimum magnetic field level at the edge of the right of way.

This FMP proposes to raise the height of sixty-two poles in the school and residential land use areas to achieve a five foot taller conductor height than otherwise required. No other low-cost mitigation is available for this project.

**PRELIMINARY MAGNETIC FIELD MANAGEMENT PLAN
AND SUBSTATION CHECKLIST
SANTA CRUZ REINFORCEMENT PROJECT**

B. Substation EMF Field Management Plan Checklist

Scope of work: PG&E will install new components in Rob Roy Substation to create a new 4-ring bus, including four new 115 kV circuit breakers, 12 new 115 kV air break switches, nine new 115 kV coupling capacitor-type voltage transformers, two new approximately 35-foot-tall dead-end take-off structures, and an approximately 30-foot by 16-foot modular protection automated control (“MPAC”) building. PG&E will expand the existing north and east fence line by approximately 50 feet, on existing substation property, to accommodate the modifications to the substation. In addition, the existing network of access roads within the substation will be expanded to surround the new components.

No.	No Cost and Low Cost Magnetic Field Reduction Measures Evaluated for a Substation Project	Measures Adopted? (Yes/No)	Reason(s) if not Adopted
1	Keep high current devices, transformers, and reactors away from the substation property lines.	Yes	
2	For underground duct banks, the minimum distance should be 12 feet from the adjacent property lines or as close to 12 feet as practical.	Yes	
3	Locate new substations close to existing power lines to the extent practical.	Yes	
4	Increase the substation property boundary to the extent practical.	Yes	